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OFFICIAL ORGAN OF THE NORTHWEST FRUIT GROWERS ASSOCIATION

VOLUME FOUR NUMBER SEVEN DOLLAR A YEAR

BETTER FRUIT

January 1910

NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, EDITION

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THE JONATHAN, A FAMOUS APPLE GROWN EXTENSIVELY IN THE NORTHWEST

PUBLISHED BY

BETTER FRUIT PUBLISHING COMPANY

HOOD RIVER, OREGON

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THE TROUTMAN
ORCHARD HEATER

FOR BURNING OIL

Crops worth millions saved this year by orchard heating. Frost is no longer to be feared if you equip to fight him with the "smudge pot." Time is going fast; don't put off till tomorrow what you can do today. Write NOW for full information and our prices on the three sizes of the Troutman Heater. Once you use these heaters you will never be without them. They make fruit growing as safe as any other business. Don't wait until next year to see what success your neighbor has, but try them for yourself. Place your orders promptly.

ADDRESS

The Round Crest Orchard Heater Co.

P. H. TROUTMAN, Vice President

Canyon City, Colorado

JONATHANS NEWTOWNS

Prunes Peaches Pears Plums Apples

The LAND OF OPPORTUNITY

Berries Cherries Strawberries Nuts

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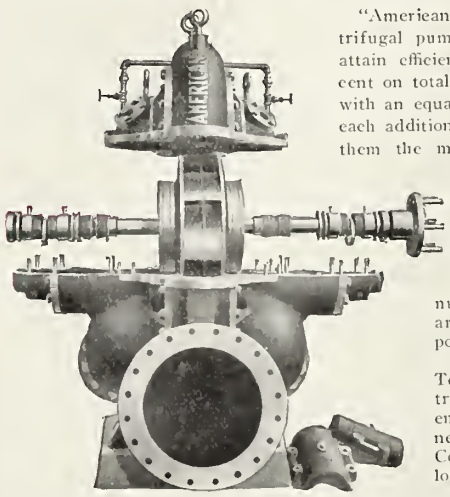

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APPLES AND STRAWBERRIES

That's all

The World Knows the Rest

The fruit growers had $36,000 in the bank in 1901. Today the three banks carry $1,000,000.

Fruit pays from $500 to $1800 per acre and is all sold at the highest prices while still on the trees.

We have 40,000 acres left awaiting some one to come to help us improve it. Do you want a chunk?

Electric light and phone service covers the valley and for pure water, healthy climate and excellent scenery we have them all going.

Write the Commercial Club today for complete information. Better still, pack your grip and come with it.

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The largest and most extensive fruit concern in the world operating in all the fruit growing sections of the civilized globe

Exclusive Purveyors of High Class Fruits

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BOX APPLES

THAN ANY OTHER CONCERN IN THE COUNTRY

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Superior facilities for handling

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Solicit Your Consignments

Reliable Market Reports Prompt Cash Returns

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The Acknowledged Fancy Fruit House of New Orleans

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All Fruits in Season

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STORAGE FOR SIXTY CARS

The Largest Exclusive Fruit Concern in the South

Richey & Gilbert Co.
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Growers and Shippers of
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Specialties: Apples, Peaches
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Wholesale Fruit and Produce
We Have Modern Cold Storage Facilities
Essential for Handling Your Products
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Spitzenbergs, Newtowns, Jonathans
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Grade and Pack Guaranteed
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Apples, Peaches and Strawberries
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Strawberries
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QUALITY
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ALWAYS SHIP TO
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Are solicited, all your shipments receiving our personal attention

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DAVIDSON FRUIT CO.

of

HOOD RIVER, OREGON

Pioneer fruit packers and shippers of this famous section. "Quality" is our watchword, and "Fruit Worth the Price" is our motto. Wire or write us for apples, strawberries or pears in season, in car lots or smaller shipments. Other fruits in season in less quantities.

Davenport Bros.

Portland, Oregon

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FRUIT & PRODUCE

Growers and Shippers of the Famous

Mosier Valley Fruits

Ryan & Newton Company

Wholesale Fruits & Produce

Spokane, Washington

We have modern cold storage facilities essential for the handling of your products

Reliable Market Reports

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YAKIMA COUNTY HORTICULTURAL UNION

North Yakima, Washington

C. R. Paddock, Manager

Apples, Pears, Peaches, Cherries, Plums, Prunes, Apricots, Grapes and Cantaloupes

Mixed carloads start about July 20. Straight carloads in season. Our fruit is the very best grade; pack guaranteed

We use Revised Economy Code

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HELENA, MONTANA

Established in Helena Quarter of a Century

Branch houses: Great Falls, Missoula and Billings, Montana

APPLES IN BOXES

We solicit consignments of best red varieties for Hamburg, which is the biggest market on the continent of Europe for foreign fruit

WE USE MODERN ECONOMY CODE

BEST VALUES, QUICKEST RETURNS AND PERSONAL ATTENTION

J. H. LÜTTEN & SON

Established 1835

CABLES: LUTTENSON **HAMBURG, GERMANY**

CALDWELL APPLE BELT

Canyon County, Idaho

THE HOME OF THE PERFECT JONATHAN

We are the owners of the prize-winning apple orchard of the United States, having won seven individual prizes out of a possible eight at the National Horticultural Congress at Council Bluffs, Iowa, December, 1908, against nineteen competing states.

We are land dealers and own our offerings. Fruit lands and suburban tracts our specialties. Liberal terms.

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Manager Dorman Land Company **Caldwell, Idaho**

For Better Fruit Buy Better Land

JUST OVER THE MOUNTAINS FROM OREGON IN A BEAUTIFUL CALIFORNIA VALLEY
YOU CAN PICK FRUIT EVERY MONTH IN THE YEAR

You can cut alfalfa six times and net $60 per acre. Two crops of potatoes and other vegetables give double the results obtained elsewhere. Our irrigated lands are selling fast at $150 per acre, with water right, on easy terms. No damaging frosts; cheap river and rail transportation; adjoining the Stanford University vineyard. The chance of a lifetime.

WRITE US FOR FREE BOOKLET

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WHITE SALMON VALLEY

The north half of that great fruit belt, of which Hood River is the south half.

Recognized as the home of the Spitzenberg and Newtown apple.

Located on the Spokane, Portland & Seattle Railroad, has splendid shipping facilities, fruit growers' union, beautiful scenery, plenty of pure water, fine climate.

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WHITE SALMON LAND COMPANY White Salmon, Washington

Arcadia Orchards Company–Irrigated Orchards

The Land of Sunshine *The Center of the Best Fruit Belt in Washington*

Only twenty-two miles from Spokane. Excellent transportation facilities, ideal climate, irrigation by gravity

Our Plan: We plant, cultivate, irrigate and care for your orchard for four years, and pay your taxes for five years. You may remain at your present occupation while we bring your orchard to bearing. No charge for water. The largest private irrigation project in the West. Buy now, before a further increase in values. Easy terms. Send for literature.

ARCADIA ORCHARDS COMPANY Hyde Building, SPOKANE, WASHINGTON

What Walla Walla Wants is You

Our valley is an agricultural paradise.
We have hundreds of prospering ranches.
We have the oldest orchards in the state.
We have the earliest strawberries in the state, year after year.
We have a climate that is right, and gardens grow nearly all winter.
We have the noted Blalock fruit farm of 1,500 acres.
We have the famous Dumas orchard of 100 acres, which has produced 69,000 boxes of high grade apples during the past two seasons.

We have the soil, and the water in abundance, and our valley has been making good, as a place to farm and a place to live, for the past fifty years—yes, we emphasize that latter point, for it is of more importance than is sometimes understood. **WALLA WALLA VALLEY IS A GOOD PLACE TO LIVE,** for here agriculture goes hand in hand with a long established "civilization." In fact, the chief city of the valley, in addition to offering every ordinary convenience and benefit, is the home of the famous Whitman College, now accumulating an endowment of $2,000,000, and ready today, with the scores of other schools throughout the valley, to welcome your children to opportunities equal to those of the East.

ASK QUESTIONS

Commercial Club, Walla Walla, Wash.

MOSIER

The natural home of Newtown and Spitzenberg apples

Apple Land

Good, Better, Best, at Prices Lower than Less Valuable Land in Other Localities

MOSIER APPLES AT HOOD RIVER FAIR

Scenery, climate, water and general conditions unsurpassed for residence, and for the raising of all kinds of fruit. Mosier is a Siamese twin to Hood River (six miles east) in the fruit industry.

Further information gladly furnished by

Commercial Club of Mosier Valley

MOSIER, OREGON

WEISER FAT LAND

See or write

Feltham-Klotz Land Company

WEISER, IDAHO

For description and prices on choice irrigated fruit lands, orchards, stock ranches and timber lands

Upper Hood River Valley

Cheap and the best of land. Plenty of water for irrigation at low rates. Good transportation facilities. You are cordially invited to see what I have done at my home in six years. I handle these lands.

W. H. MARSHALL

Dee, Oregon **In Hood River Valley**

SPRINGVILLE

Is to Utah

What Palisade is to Colorado

The Natural Fruit Center

Buy cheap lands now

ROE A. DEAL Springville

John Leland Henderson

Incorporated

COUNTY SURVEYOR

HOOD RIVER, OREGON

POSSESSES

CLIMATE—A desirable medium between the drier eastern and the more moist western conditions of the Northwest.

SOIL—Volcanic ash, rich in phosphates, and recognized as the best in the world for apples and strawberries.

Makes a specialty of real estate, conveyancing, loans and surveying. The president, John Leland Henderson, is a practicing lawyer residing in Hood River, and has been identified with the Hood River Valley for thirty-three years

The Willamette Valley

OREGON

WAS originally known as the "Garden of Eden." There Eve tempted Adam with the finest apples ever grown, and there the sons and daughters of Eve are still growing apples unexcelled. If you want to know about Apple Land for $100 to $350 per acre, as good as the sun ever shines on, address Albany Commercial Club, Dept. A, Albany, Ore.

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WAUCOMA ABSTRACT AND INVESTMENT COMPANY

(Incorporated) Hood River, Oregon

Willamette Valley Fruit Lands

In Tracts to Suit

Rich soil. Delightful climate

For descriptive literature write

OLMSTED LAND CO. Salem, Oregon

160 ACRES

Southern Oregon Fruit Land

$1650

J. H. ROBINSON

Route 2 Grants Pass, Oregon

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OF BIG, RED APPLES

WE ALWAYS HAVE SOME

CHOICE TRACTS TO OFFER

At popular prices, and sell them strictly on their merits. Years of study given to Hood River and its products. Can sell you intelligently. Call on or address

Geo. D. Culbertson & Co.

Leading Land Agents Hood River, Oregon

We will plant and care for an

Apple Orchard

for you until it begins to bear—meantime you make small monthly payments

As the largest orchard operators in the Spokane country we invite you to become interested with us and in a way entirely within your means. I will gladly submit full data, price of tracts, terms, and other information of value upon request. Just request our booklet, "The Commercial Orchard," and say you want to know more. A postal will do.—A. G. Hanauer, Vice President.

Hanauer-Graves Company

First and Stevens

SPOKANE, WASHINGTON

Owners of

MEADOW LAKE FARMS

Ten miles southwest of Spokane on Cheney Electric Line. Five and ten-acre tracts, $150.00 to $200.00 an acre. Your own terms.

ROGUE RIVER VALLEY

Famous for its APPLES, PEARS, PEACHES, GRAPES, MELONS AND CLIMATE

THE natural home of the Spitzenberg and Newtown apples. Rogue River pears have led the United States for the past five years in the highest price in the New York market. No peaches of the South excel those of Rogue River, and trees are healthy. Grapes perfection in color and flavor and the best of shippers, and growers have more orders than they can fill. Rogue River canteloupes, watermelons and cassabas, none better and big moneymakers. The Rogue River Fruit Growers' Union gets the highest price for fruit, and the Southern Pacific gives terminal rates on shipments East. Climate the perfect medium between arid California and webfoot Oregon. No storms or winds to injure fruit crop. Almonds and figs ripen perfectly and palms grow in the yards. Land yet cheap, but will double in two years. American community and good schools, rural mails, telephones, etc. Full information by addressing CHARLES MESERVE, Medford, Oregon, Seller of *Real Estate in all parts of Rogue River Valley.* References by permission: Rogue River Fruit Growers' Union, First National Bank of Medford.

FOR SALE—APPLE LAND

160 acres in the beautiful Bitter Root Valley, only three-quarters of a mile from railroad station. Fine soil; 270 inches free water; creek runs through place; part cleared and has thirty to forty tons of hay a year; five acres old orchard. Price $100.00 per acre if sold at once; part cash, balance terms. Will double in a year. For particulars address E. S. Morgan, owner, No. 408 Wells Fargo Building, Portland, Oregon.

ALWAYS A FRUIT CROP IN

HOOD RIVER VALLEY

With best of prices, scenery, climate, transportation, soil, mountain water, timber, etc. Send for our list of lands and literature

G. Y. EDWARDS & CO. Hood River, Oregon

MOSIER

Also called East Hood River

FRUIT LANDS

In large or small tracts. Some very good land at low prices at present. Good growing community. Six miles east of Hood River. Parties wishing to buy will do well to write or see

GEO. CHAMBERLAIN

MOSIER, OREGON

White Salmon Valley

WASHINGTON

Across the river from Hood River Valley, Oregon in the Banner Apple Belt of the World

The WHITE SALMON VALLEY today presents OPPORTUNITIES FOR INVESTMENT beyond that of any other FRUIT REGION in the Northwest. It is the north half of a LARGE VALLEY lying between Mount Adams on the north and Mount Hood on the south. The mighty Columbia flows between and divides this valley. From the Columbia River to Mount Hood forms the Hood River Valley, and from the Columbia River to Mount Adams forms the White Salmon Valley. Both these mountains are snowclad all the year and influence the climatic conditions. This, together with a volcanic ash soil, produces apples that are superior to all others in the world in FLAVOR, SIZE, COLOR, and, most important of all, KEEPING AND SHIPPING QUALITIES.

Ninety per cent of the fruit grown in this valley is exported, bringing the highest market prices.

THE CLIMATE of this region is ideal. It is located in the midst of the CASCADES, with a pure mountain air and free from excessive rains or drouth. The snow-covered peaks at either end of the valley temper the heat of summer and make the summer nights cool and invigorating. The winters are as a rule mild and short. The scenery is as fine as may be found anywhere on the continent.

The valley has been held back heretofore through lack of railroad transportation, but the SPOKANE, PORTLAND & SEATTLE RAILROAD, part of the Hill system, now in operation, gives this valley the best of shipping facilities.

NOW IS THE TIME TO SECURE A CHOICE ORCHARD TRACT AT A LOW FIGURE. Write today for particulars of this wonderful valley to the

WHITE SALMON VALLEY DEVELOPMENT LEAGUE White Salmon, Washington

ACRES 520 ACRES

Of Rich Orchard Land in One Body

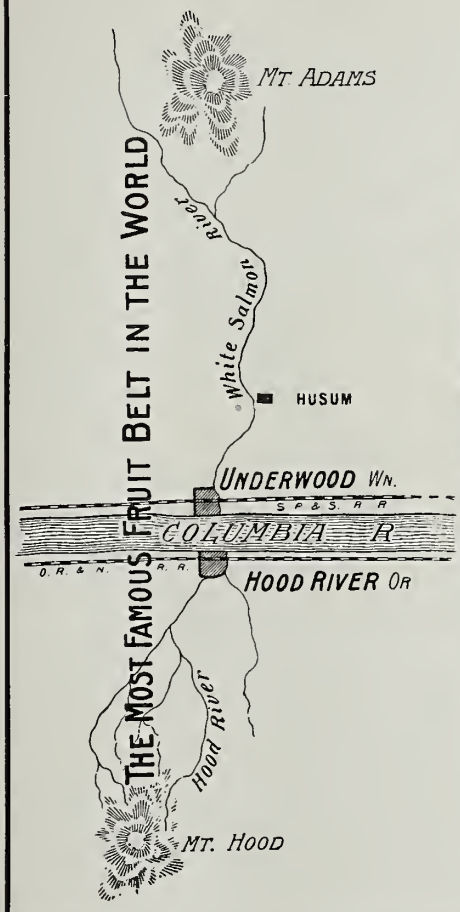
IN THE

White Salmon Valley

WASHINGTON

150 acres ready to set to trees, 200 acres easy to clear, 170 acres fine timber, *all first class fruit land*

For full Description, Price and Terms Address J. C. MacINNES, White Salmon, Wash.



UNDERWOOD

The Gateway to the White Salmon Valley

WHITE SALMON VALLEY FRUIT GROWERS' UNION OF UNDERWOOD, WASHINGTON, WON THREE IMPORTANT PREMIUMS AT SPOKANE
First on Best Four-Tier Newtowns, Second on Best Ten Boxes Newtowns, First on Best Pack

Twenty minutes from Hood River by ferry. Two hours by rail, seven hours by boat from Portland. Twenty-five thousand acres first-class fruit land tributary to this point. Has a strong Apple Growers' Union, which controls the output of the valley. Same fruit, same markets, same prices as Hood River has. Fine class of people coming in—a community of *homes*. Land close in to river and railroad $40.00 to $150.00 an acre *now*, but advancing rapidly.

Write, phone or call on

W. F. CASH UNDERWOOD WASHINGTON

Splendid Opportunity for a Good Investment

A chance of a lifetime to secure Ten Acres of Choice Apple Land at only $100 per acre

20 Acres for $1975 30 Acres for $2900 40 Acres for $3750

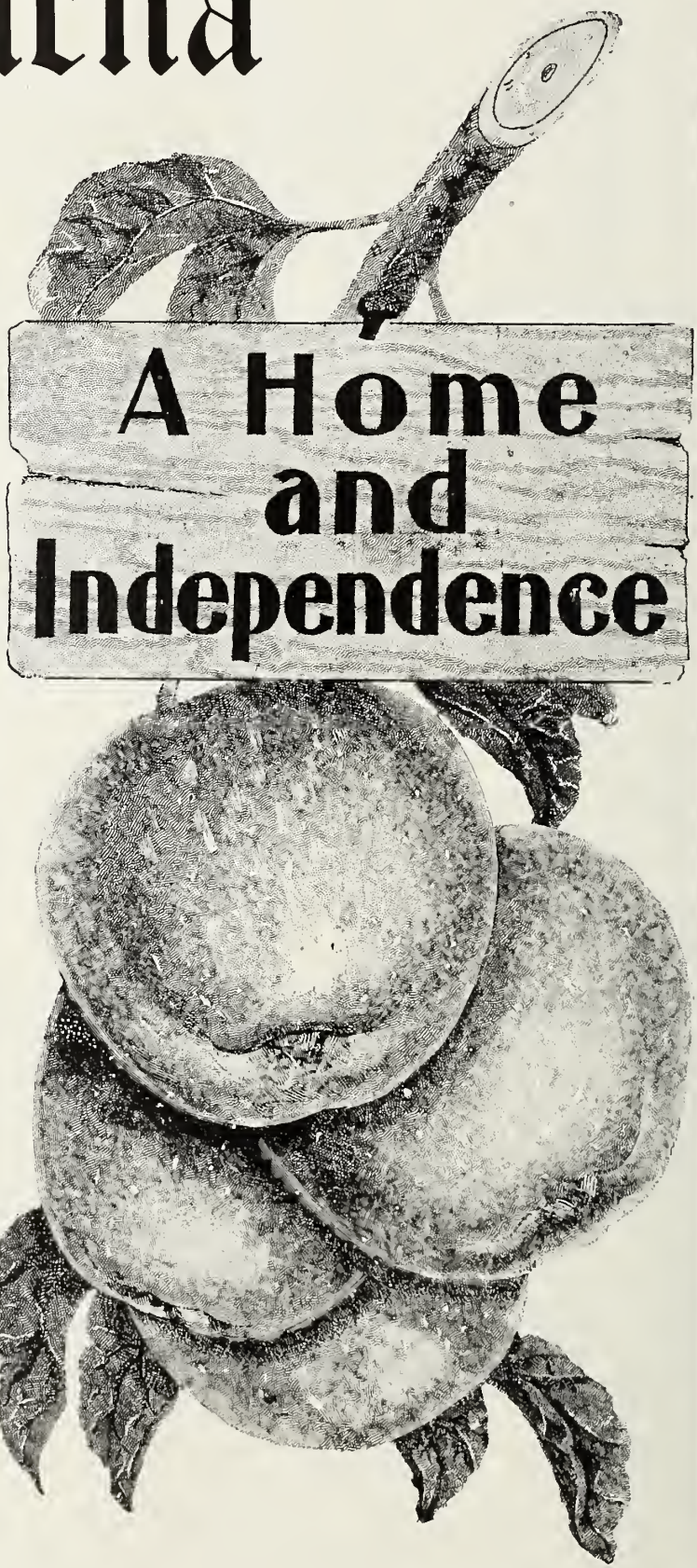
White Salmon Valley Apples at Hood River Fair

These tracts are located only four miles from Hood River, across the Columbia River, at Underwood, Washington, in the famous White Salmon Valley, with a grand view of the Columbia River and Hood River Valley. No waste land; all rich, deep soil; good, natural air and water drainage; no frost. Address owner

C. R. GREISEN, Hood River, Oregon

THEY ALL LIKE

Washtucna Valley



A FERTILE FRUIT DISTRICT in the State of Washington, because the soil is rich and deep, particularly well adapted for growing large commercial apples. Then its splendid gravity irrigation system insures large crops. The railroad facilities in the Washtucna Valley are unequaled in the Northwest. The quick marketability of all your produce at good prices is an advantage that has made Washtucna Valley so popular among fruit growers and homeseekers.

Money for You

A five or ten-acre tract purchased in the Washtucna Valley now will surely earn big profits for you. While your orchard is coming into bearing you need not worry about your livelihood, because you can plant vegetables between the rows of the trees, which can be marketed at handsome prices. Then again, in Washtucna Valley you can get employment at good wages if you so desire it.

Write for our illustrated booklet telling all about this wonderful and productive fruit district. Use the coupon today.

The Palouse Irrigation & Power Co.

SPOKANE OFFICE: 412 First Avenue
SEATTLE OFFICE: 114 Columbia Street

Gentlemen:

Please send me your booklet about Washtucna Valley.

Name _____

Address _____

A Revolution in Spraying!

HIGHLY
CONCENTRATED
RELIABLE
AND
EFFECTIVE
CLEANSE AND
INVIGORATE

COOPER'S SPRAY FLUIDS

NO SEDIMENT
NO CLOGGING
MIX INSTANTLY
WITH
COLD WATER

Read Hood River's Testimony

Hood River, Oregon, November 9, 1909.

Mr. C. G. Roberts:

In response to your request for results in using Cooper's Sprays last season, I have to inform you that it was a success, and am so well satisfied that I propose to use nothing else during the coming season, and confidently recommend its use to my neighbors in Hood River and fruit growers generally. The V1 or winter spray is most convenient and clean handling, and cleaned up my trees from loose bark and insects or eggs which may have harbored therein. The summer spray, V3, destroyed codling moth, the brown aphis, and, so far as I know, the spores of fungus, as my apples ripened almost free of imperfection, ready for packing, as I did not require to wipe them, as usual by other sprays. L. D. Boyed.

Hood River, Oregon, November 18, 1909.

This is to certify that I used Cooper's V1 Spray for fungus, according to directions, on six acres of Newtowns last March, of which last year was about 20 per cent fungus, this year not more than one per cent. The spray is easy to prepare and very agreeable to apply, and I consider it the most economical spray I ever used. I use the finest nozzle, with a high pressure, and choose a quiet day for spraying to get the best results. O. M. DeWitt.

Hood River, Oregon, November 17, 1909.

In regard to the Cooper Spray, in answer to your inquiries as to what success I have had with it, will say that I have been somewhat worried about fungus on my apples for several years until last year, when I used V1 for winter spray, and am well pleased with results, as my apples were almost entirely clean of fungus this season. Shall try it again the coming season. J. R. Crosby.

Hood River, Oregon, November 17, 1909.

I used the Cooper Spray V1 for fungus and can say that I am well pleased with its results. On a crop of about 300 boxes of apples I had only about one box that was affected with fungus. As for convenience, I can recommend it ahead of any other spray I ever used. My trees were affected but very little with aphis after using the V1. J. H. Eggert.

Hood River, Oregon, November 20, 1909.

Mr. C. G. Roberts:

I have used the Cooper Winter Spray and it put my trees in fine and healthy shape. I consider it a very economical spray and pleasant to handle, not hurting the hands nor having the disagreeable effect on the hands and face of the sprayer of the lime and sulphur sprays. E. C. Mahaney.

Hood River, Oregon, November 17, 1909.

Mr. C. G. Roberts:

Dear Sir—In answer to your inquiry about results from the use of Cooper's Spray, will say that my apple orchard had become badly infested with fungus. I made one application of V1 spray early in March, while the trees were yet dormant, with results that my apple crop is practically free from that disease. It also cleansed the trees of moss and other objectionable growths. I am so well pleased with results that I shall use it again next year. Yours very truly,
M. D. Odell.

Hood River, Oregon, November 20, 1909.

Mr. C. G. Roberts:

I have used three gallons of winter spray, the Cooper V1, on my orchard and the orchards near mine that I am caring for. I find it the best spray I ever used, as it cleaned my trees of scale and fungus and put the trees in the most healthy condition. This spray is pleasant to handle, having none of the objectionable qualities of lime and sulphur spray, and I consider it the most economical I ever used. I recommend it to my neighbors and fruit growers generally.
L. A. E. Clark, Pippin Hill Fruit Farm.

Hood River, Oregon, November 20, 1909.

C. G. Roberts, General Agents Cooper's Spray:

Dear Sir—I used V2 fluid, or summer spray, this spring, for green aphis, and got very satisfactory results; in fact, as good as any other kind I ever used. Yours truly, A. D. Moe.

Hood River, Oregon, November 13, 1909.

I will say that I have tried the Cooper Summer Spray and it cleaned my trees from the green aphis as good as any spray I have had experience with. E. N. Benson.

Hood River, Oregon, November 20, 1909.

This is to certify that I have used the Cooper Spray, V2, on my orchard and it cleared it of green aphis and fungus and put the trees in healthy condition. Louise J. Schiller.

I hereby certify that I used the Cooper Spray once in the spring and the trees showed marked improvement. Charles Davis.

Hood River, Oregon, November 27, 1909.

This is to certify that I have used Cooper's Tree Spray Fluids, V1, for killing San Jose scale and found it very effectual.
G. R. Castner, County Fruit Inspector.

Write for 32-page booklet (third edition) just published

Containing much interesting matter, also testimonials from many other fruit growers

Local Distributing Agent:

C. G. ROBERTS, 247 Ash Street, Portland, Oregon

Sole Manufacturers:

WILLIAM COOPER AND NEPHEWS, 64 West Illinois Street, Chicago, Illinois

If You Want Good Land in the Hood River District

That will raise the world famous Spitzenberg and Newtown Apples, go to

J. H. HEILBRONNER & CO.

THE FAMOUS HOOD RIVER PACK

THREE-YEAR-OLD SPITZENBERG OF HOOD RIVER

WE SPECIALIZE IN

High Class Fruit Land

And tell our customers the actual facts. Some of our clients have doubled their money in two years, and some of them could make a much larger profit if they wanted to sell.

This is the class of property you want, and we are the people that can start you right.

J. H. Heilbronner & Co.

THE RELIABLE DEALERS

Davidson Building Hood River, Oregon

Hood River, the Land of Opportunity

10 Acres Located one-half mile from the city limits; all in orchard, with the exception of a half acre, where there is a cluster of oaks and pines reserved for a building spot. There are twelve 12-year-old trees of assorted variety for family use; 300 Newtowns and Spitzenbergs, 5 years old next spring; 140 Newtowns and four Arkansas Blacks for pollenizers, 3 years old next spring; 17 pears, 30 cherries, 10 peaches and 2 walnuts, all 4 years old. There are six acres of strawberries planted between the rows, which will give an immediate income. The place lies ideal and is a good buy at $12,000.

20 Acres Located five miles out in the center of the West Side, on main county road; nice location, fine soil, good drainage; 15 acres in 3-year-old commercial orchard, in good condition, consisting of 375 Newtowns, 600 Spitzenbergs, and 210 Arkansas Blacks, Jonathans and Wagners for pollenizers. Balance of place is in meadow. Five inches of water stock goes with place. Price $11,000; $3,000 cash.

22 Acres Unimproved, four miles southwest of Hood River on main county road; good clay soil, fine drainage, ideal location; three acres cleared and plowed, and the balance all slashed and burned; new two-room house on place. Price $350 per acre; $3,500 cash. This place will easily be worth $600 per acre when set to orchard.

20 Acres Five and one-half miles out, in the Oak Grove district; perfect soil, fine drainage, high and sightly; stream through place, which affords good fishing and free irrigating water; new seven-room house, hard finished, costing $1,750. There are 262 12-year-old apples, mostly Spitzenbergs; 90 4-year-old Spitzenbergs, 207 2-year-old Newtowns and Spitzenbergs, and a family assortment of peaches, pears, cherries, apricots, etc., all in prime condition; five acres of strawberries, mostly spring planting; half mile to school and store; R. F. D. and telephone. Price $13,500; $5,000 cash.

20 Acres Unimproved, about seven miles from Hood River on East Side; high and sightly; easily worked red shot soil; all good orchard land; under the ditch; some oak and pine timber. Price $150 per acre; easy terms.

Acres 9 All under cultivation, two and one-half miles southwest of Hood River, facing north on main county road; good drainage; easily worked clay soil; one mile to school and church. There are 160 Newtowns, 20 Arkansas Blacks and 20 Jonathans, all 1 year old, and 50 1-year-old peach trees as fillers. The place is all under cultivation and all under the ditch. Price $4,500; $2,000 cash, balance terms.

WE HAVE MANY MORE, LARGE AND SMALL, IMPROVED AND UNIMPROVED. IT WILL PAY YOU TO SEE US BEFORE YOU INVEST

DEVLIN & FIREBAUGH

LEADING DEALERS

MAIN OFFICE
SWETLAND BUILDING, PORTLAND, OREGON

BRANCH OFFICE
HOOD RIVER, OREGON

BETTER FRUIT

A MONTHLY ILLUSTRATED MAGAZINE PUBLISHED IN THE INTEREST OF MODERN AND PROGRESSIVE FRUIT GROWING AND MARKETING

THE NATIONAL APPLE SHOW HELD AT SPOKANE

BY AUGUST WOLF

DISTINCTIVELY unique, in an age of expositions, was the second National Apple Show in Spokane the middle of November, when ingenuity and enterprise transferred one of the most interesting wealth-producing features of this land of opportunity to the state armory and adjoining temporary buildings, including the largest tent-covered structures ever erected on this continent for exposition purposes. There were 1,500 displays, ranging from the full carloads to single plates of the King of Fruit, which in scope, detail and significance, have had no counterpart in the history of the world.

The educational value of the exhibition, in which growers from twenty-three states and two Canadian provinces competed for prizes and premiums of an aggregate value of $25,000, was apparent on all sides in bringing the eager seeker after trustworthy information into contact with living answers. The immediate effect was that thousands were awakened to the manifold opportunities and exceptional advantages in the pursuit of this highly remunerative branch of horticulture in the Northwest. It also stimulated orchardists to make yet greater and more determined efforts in reaching for perfection in the growing and preparation of their products for commerce.

The show was heralded by the press of the United States, Canada, and parts of Europe, and the attendant publicity was so widespread that its benefits, through the influx of outside capital and desirable population into the newer as well as the established orchard districts, will be felt for years to come.

The exhibits, occupying approximately 100,000 square feet of floor space, were representative of their districts and presented a series of comprehensive pictures, which left nothing untold as to the incomparable climatic and soil conditions, so highly necessary for the production of the most perfect fruit. But perhaps the most interesting phases of the show were the stories of achievements and successes by the growers themselves — the men who were the greatest factors in the exposition. Many of these began in the rank sagebrush, where tracts of land considered absolutely worthless not more than a dozen years ago, have been transformed into profitable orchards by intelligent cultivation, thus once again emphasizing the fact that work and perseverance make all things possible.

Thirteen cars, each containing 630 boxes of apples, showing the highest state of cultivation in the country, were exhibited by growers from districts in Washington and Oregon, and presented an array of brilliant coloring spread out in expansive slopes. The color scheme was augmented by the effects produced by expert packing and decorations. The large, round Rome Beauty, attractive in its yellows and light reds, was the popular apple in point of entry, but was outclassed in quality rating by the brilliantly red Spitzenberg and fine grained Grimes Golden, the latter a cylindrical fruit of rich, refreshing flavor. The former, entered by Messrs. Tronson & Guthrie, of Eagle Point, Oregon, carried off the premier honors in the sweepstake, valued at $1,500, of which $1,000 was to first, while the Grimes Golden fruit, exhibited by W. W. Sawyer, of Sunnyside, Washington, was second, both also winning first prizes of $250 in their classes. The third prize in the chief contest was won with a car of Spitzenbergs, exhibited by E. C. Hill, of North Yakima, Washington, who also took second money in that class. Other winners in their classes were: Ed. Perry, North Yakima, Winesaps; B. C. Cameron, Farmington, Washington, Rome Beauty; C. E. Atkinson, Green Bluff, Washington, Wagener; J. E. McCurdy, Toppenish, Washington, mixed. The entries by Charles Pope, Ashland, Oregon, Yellow Newtowns, and R. F. Wright, Chelan, Washington, Rome Beauty, were received too late for competitive display, but were given special awards of honor.

The limited displays, the district and free-for-all exhibits and the ten, five and single box and plate entries were attractive and interesting, as were the pyramids of fifty big apples, the largest apples, the new varieties, of which there were eighteen, and the seedless-coreless apple, the product of a fifteen-year-old tree on Moran Prairie, near Spokane. Most of the growers who examined the freaks said that the coreless apple would be a mistake, while others declared there are many who like the pulp of the seeds, and always include the eating of them as the finishing part of an apple. Mr. Short, who exhibited the apples, does not claim credit as being the propagator of the fruit. He says he had no part in eliminating the seeds or abstracting the core by grafting or culture. He exhibited the apples, which were halved and quartered, as novelties, and as such they were of interest. More than 250 varieties of apples were shown in the 1,200 plate displays.

Professor H. E. Van Deman, of Washington, D. C., an expert of recognized ability, was at the head of the board of judges, and was assisted in making the awards by H. M. Dunlap, of Savoy, Illinois, who was chief judge in 1908; George J. Kellogg, of Lake Mills, Wis-

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COLLIER'S
The National Weekly

New York, November 16, 1909.

Dear Mr. Shepard:

Please let me extend to you my congratulations for your excellent November number. It is a very splendid thing.

Always, with best wishes,

Very truly yours,

RICHARD LLOYD JONES

Engraved by Hicks-Chatten Co., Portland, Oregon

EXHIBIT OF SPITZENBERGS BY TRONSON & GUTHRIE, EAGLE POINT, OREGON. WINNER OF SWEEPSTAKES AND FIRST IN CLASS AT SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, NOVEMBER 15 TO 20, 1909. H. B. TRONSON HOLDING THE GOLD MEDAL BANNER

consin, an exhibitor and judge of fifty-four years' experience; A. P. Bateham, of Mosier, Oregon, who has devoted years to a study of the commercial points of apples, and W. J. Green, of Wooster, Ohio, director of the Ohio State Experiment Station. The awards were made strictly upon merit, under the rules adopted by the American Pomological Society, twelve years ago, upon these cardinal points: First, value of the varieties for the purpose to which they may be adapted; second, color, size and uniformity of the fruit; third, freedom from marks of insects and other blemishes; and fourth, pack. The diagonal pack was recommended by the judges as being the best for commercial purposes. To give an idea of the excellence of the cars exhibited, it is announced that the winning car scored ninety-two points, while none went under eighty.

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THE FIVE JUDGES OF THE SECOND NATIONAL APPLE SHOW, SPOKANE, 1909
1, George J. Kellogg, Lake Mills, Wisconsin; 2, W. J. Greene, Wooster, Ohio; 3, H. E. Van Deman, Washington, D. C.; 4, A. P. Bateham, Mosier, Oregon; 5, H. M. Dunlap, Savoy, Illinois
Most competent and experienced men

The exposition was a success from the beginning, when President Taft, by pressing a golden key in the White House at Washington, D. C., the morning of November 15, announced the formal opening. This was heralded by telegraph throughout the Northwest upon receipt of the President's message of congratulation, and the most intense interest was maintained until the close, shortly before midnight on November 20. The opening ceremonies, which took place in the armory, were attended by men prominent in the commercial, industrial and professional life of the Northwest, and several thousand residents of Spokane. E. F. Cartier Van Dissel, second vice president and chairman of the board of trustees, presided, and the addresses of welcome were delivered by Mayor Nelson S. Pratt for the City of Spokane, Governor Marion E. Hay for the State of Washington, and David T. Ham, first vice president of the Spokane Chamber of Commerce, spoke in behalf of that organization and the Washington

State Horticultural Association. Tom Richardson, manager of the Portland Commercial Club, also heartily congratulated the management of the show and the people of Spokane upon undertaking such a pretentious affair as an apple show, truly national in character, and having it ready on time.

The principal address was by Howard Elliott, president of the Northern Pacific Railway Company and head of the second show, succeeding Louis W. Hill, president of the Great Northern Railway Company, who occupied a similar position in 1908. Mr. Elliott said that while there are many railroads and railroad presidents in the United States, there is only one National Apple Show, and only one president of that, "and," he added, amid prolonged applause, "I am very proud to be that man and to have the right to welcome you here today."

After congratulating the trustees and the growers, Mr. Elliott paid a merited tribute to Ren H. Rice, secretary-manager of the show, who, he said, deserves much credit for his work and executive ability in gathering together and arranging the truly wonderful display of apples, adding, "and I take the liberty of expressing to him and the board of trustees the thanks of Spokane, of the Inland Empire and of the apple growers all over this continent for the encouragement they are giving toward better work in the orchards of the country."

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PARTIAL VIEW OF SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, 1909
A most comprehensive picture showing arrangement of "car lot" exhibits

Mr. Elliott reviewed in a most comprehensive way the history of the apple industry, showing also its decline, through neglect of orchards in the eastern and middle western states, during the last ten years. He emphasized the

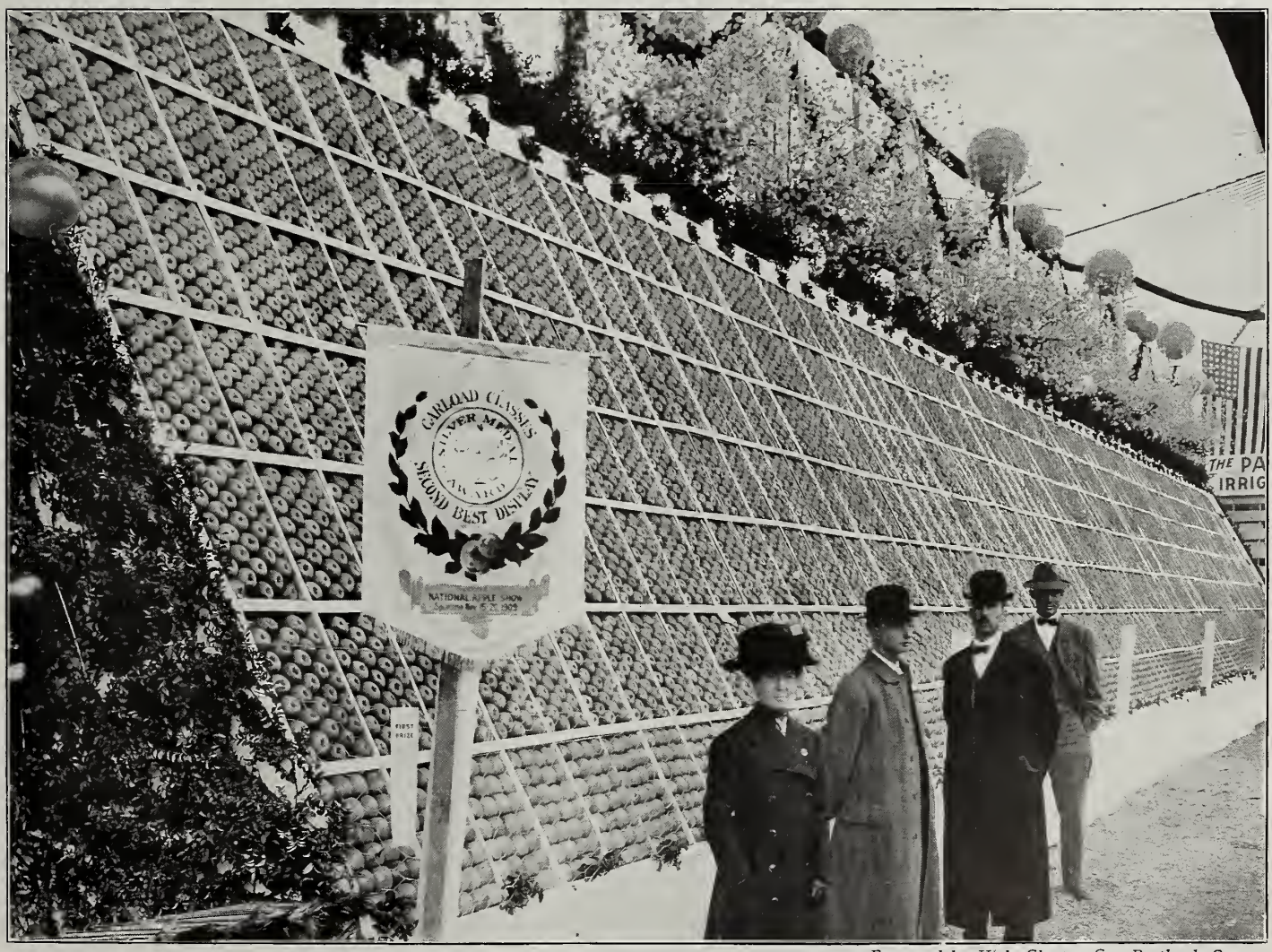

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EXHIBIT OF GRIMES GOLDEN BY W. W. SAWYER, OF SUNNYSIDE, WASHINGTON. WINNER OF SECOND PRIZE AND SWEEPSTAKES AND FIRST IN CLASS AT SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, NOVEMBER 15 TO 20, 1909
MR. SAWYER IS IN THE CENTER IN GROUP OF THREE MEN

statement that, while the apple is a healthful and wholesome fruit and can be used as food in many forms, the production fell from 58,466,000 barrels in 1899 to 23,025,000 barrels in 1908. "But," he continued, "this large falling off will soon change to an increase, and largely through the stimulus given to the industry by the National Apple Show. The work of rejuvenating the orchards in many of the eastern states is wise, because, when the apple habit is once developed it becomes permanent, and our great population will need more and more apples."

The speaker told of the beginning of apple culture in the Northwest in 1845, when a few trees, hauled across the plains by an ox team, were planted in fertile soil near Oregon City, in the Willamette River Valley in Oregon. This, he said, was the start of what will be one of the great industries of the Northwest. Prior to 1900, he added, the shipment of apples from the Northwest was small, but during the last few years there had been a tremendous increase, and in the next few years there would be a still more rapid increase, as the newer orchards begin to bear fruit. The production at the end of 1915 was placed at 65,000 cars, the basis of calculation being two boxes to a tree, while at three boxes to a tree, an ultra-conservative estimate of yield, the crop in Oregon, Washington, Idaho and Montana, would amount to 97,500 cars, equal to 3,900 trains of twenty-five cars each, or the dispatching of seventy-eight trains a day for fifty days.

Mr. Elliott placed the number of apple trees planted and growing in the four states mentioned, at 19,500,000, Washington being in the lead with 9,000,000; Montana, 4,000,000; Oregon, 3,500,00, and Idaho, 3,000,000. To be conservative, and make due allowance for the unexpected, he used an estimate of two boxes for the production of each tree, giving a yield of 39,000,000 boxes, which, he said, will be none too much for the consumption of the people by that time. With this large production, he added, it is not to be expected that all apples will bring the premium prices paid for some of the fruit at present, hence it will be necessary for orchardists to study carefully the expense accounts, so as to reduce the cost of production.

After briefly outlining the history of the northwestern states and mentioning some of their principal resources, Mr. Elliott said that they and the Inland Empire are peopled by strong and hopeful men and women, who

> Crossed the prairie, as of old their fathers crossed the sea,
> To make the West, as they the East, the homestead of the free.

"That they are performing that task bravely and well," he said in conclusion, "this beautiful city and this apple show are good evidence. They love their country and they are glad to welcome the apple growers from the states of the eastern slope of the Rocky Mountains, from the Missouri and Mississippi Valleys, from the lake basin and from the Atlantic Seacoast. They are also glad to welcome their friends from British Columbia and Nova Scotia. Without the interest and aid these districts have given, this event could not exert as wide influnce for the good of the nation as it does, and thanks are due to these visitors for their co-operation."

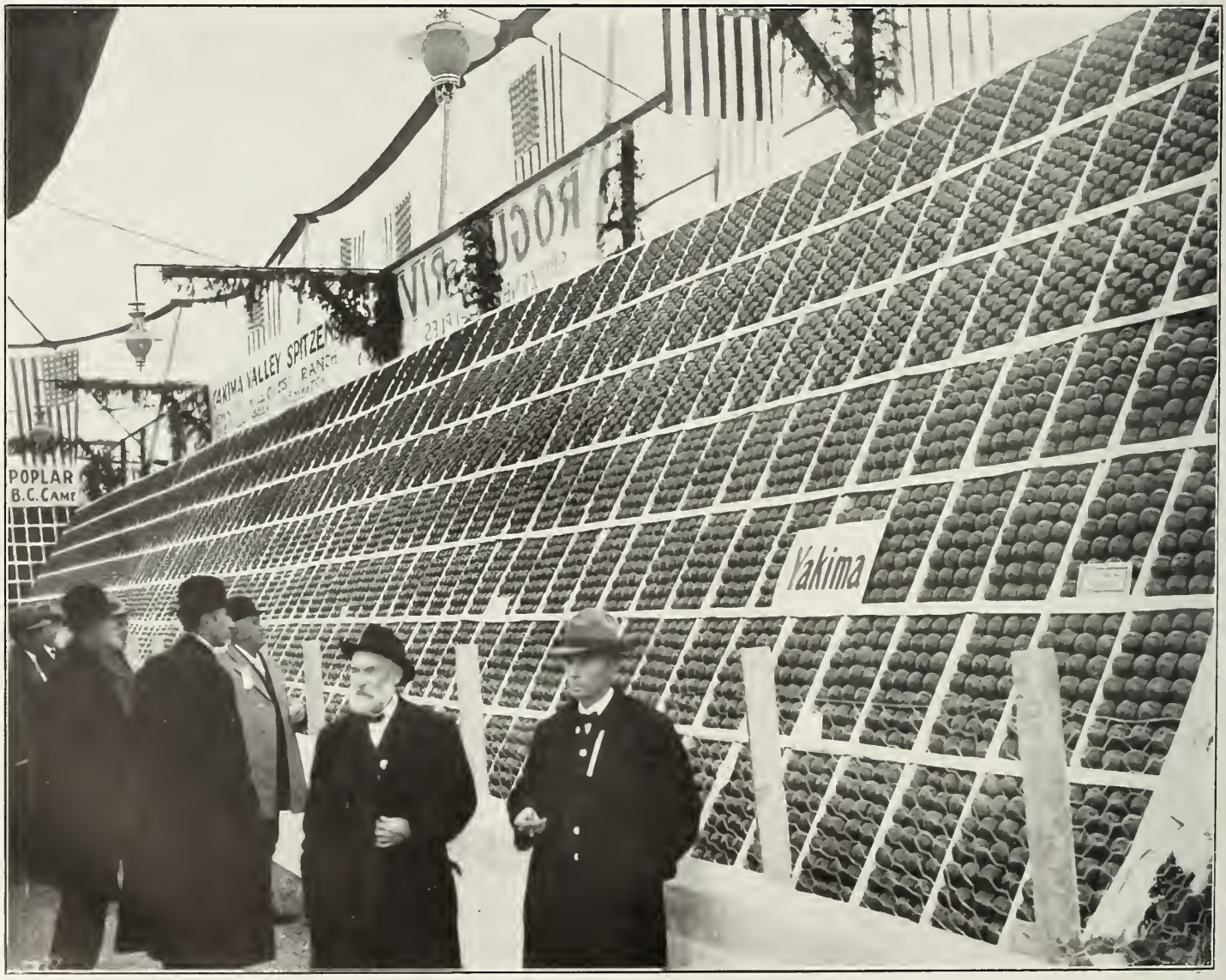

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EXHIBIT OF SPITZENBERGS BY E. C. HILL, SELAH, WASHINGTON. WINNER OF SECOND PRIZE IN CLASS AND THIRD IN SWEEPSTAKES AT SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, NOVEMBER, 1909

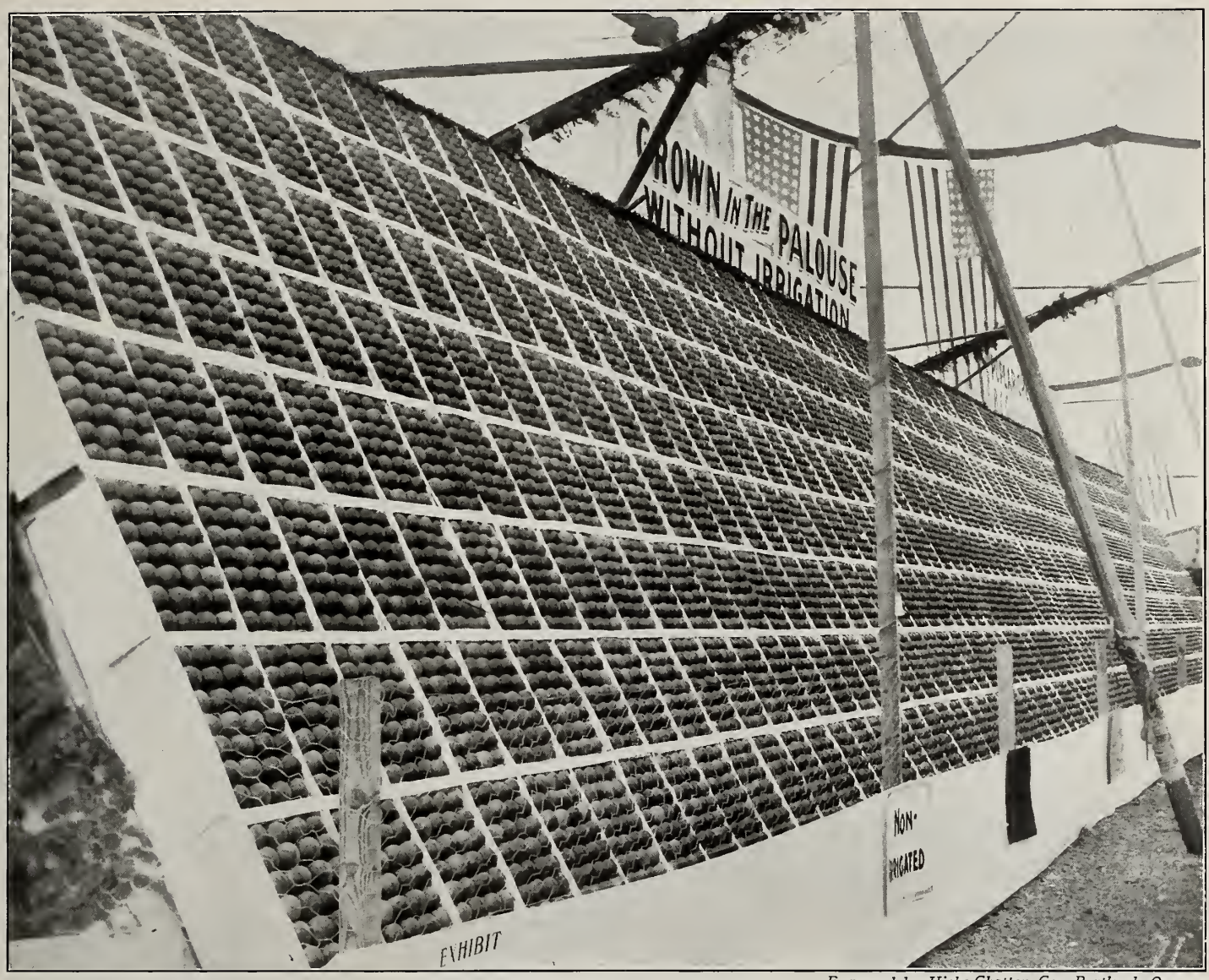

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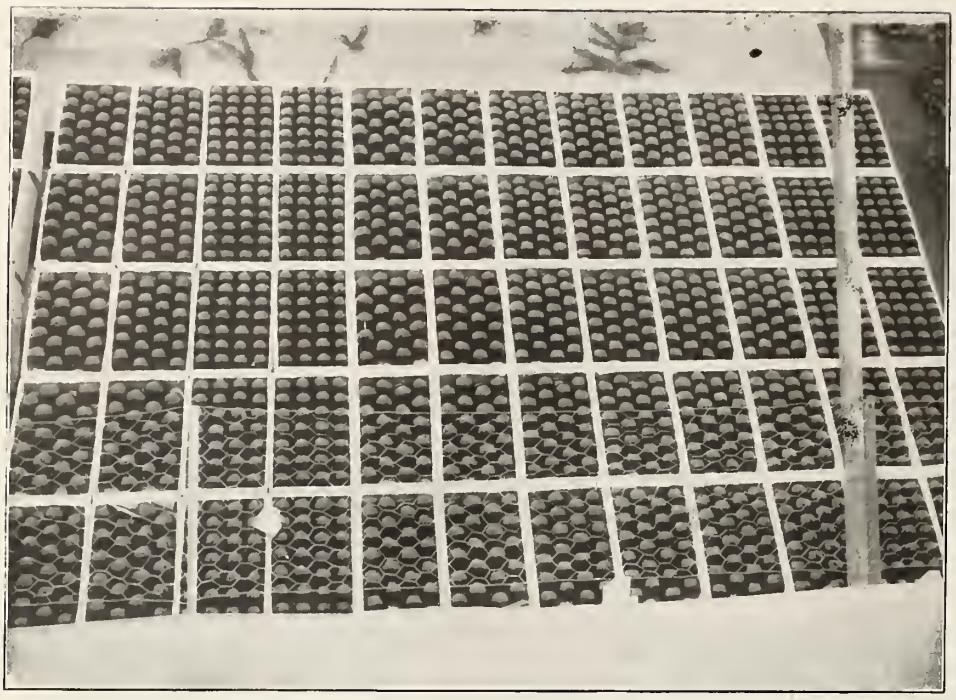
EXHIBIT OF ROME BEAUTIES BY D. C. CAMERON, FARMINGTON, WASHINGTON. WINNER OF FIRST PRIZE IN CLASS AT SECOND NATIONAL APPLE SHOW, SPOKANE, 1909

There were three conventions of prime importance to the growers in the Northwest and of more than passing interest all over the Union, in connection with the show. One dealt with the Lafean packing bill, the result being a plan to advocate the adoption by Congress of the northwestern box of a Winchester bushel, as the standard. The other was for the discussion of the problems of farm life, the gathering favoring a country life commission for the northwestern states, while the third was to fix a standard of grades. The sessions were largely attended and were ably managed by committees under the chairmanship of David Brown and Major Edwin A. Smith, of Spokane, and J. L. Dumas, of Dayton, president of the Washington State Horticultural Association. A feature of national interst was the approval by President Taft of a plan by which the Spokane Chamber of Commerce will publish for free distribution the report of the Country Life Commission, which was appointed by President Roosevelt in 1908. At the instance of Senator Tillman, who entered objection, the United States Senate ordered the report laid on the table.

Believing that the conclusions reached by the commission, headed by Professor Liberty Hyde Bailey, after holding thirty meetings in as many cities in southern, western and eastern states, would be of interest, the chamber of commerce was requested by the convention to make preparations to publish an edition of the report. Frederick E. Goodall, head of the organization, sent a telegram to President Taft, asking if there would be any objection to printing the report. The President replied, through his secretary, that there was none, and he not only sanctioned the plan but also commended the chamber of commerce upon its public spirit and enterprise.

Miss L. Gertrude MacKay, head of the domestic science department at the Washington State College, and a bevy of rosy-cheeked young women, gave a series of demonstrations during the week and served apples in scores of different forms as food. This department occupied comfortable quarters on the ground floor of the armory, where, among other things, more than 1,200 baked apples were served on the opening day. The young women also instructed hundreds of their sisters in the preparation of the apple as a staple of diet. Besides this feature and the intensely interesting exhibits already mentioned, the management offered entertaining vaudeville and musical programs by recognized performers, and two bands of fifty-two pieces, under the leadership of Professor A. G. Reemer and W. Van Hinkle. There were also demonstrations of spraying apparatus and orchard implements, cider presses, apple parers and corers, and nursery stock.

Secretary Rice was assisted during the show by a capable staff, including William D. Finley, assistant secretary; W. E. Parmelee, superintendent of exhibits; Claude Randall, entry clerk; L. S. Hurtig, director of amusements, and Robert H. Cosgrove, director of concessions. The utmost harmony prevailed, and the prize moneys and premiums, including two five-acre tracts of land in the ten-box competitions; silver cups, gold and silver medal banners, diplomas and other trophies were presented to exhibitors immediately after the awards were announced. There was no confusion, no delays and no disappointments in not providing ample space to display the



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TEN-BOX EXHIBIT AT NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, 1909

exhibits in the most attractive forms. The interiors of the buildings used to house the show were prettily decorated and on the whole the show was one of which the people of Spokane, who have an enviable reputation for carrying out big undertakings successfully, have every reason to feel proud.

The officers of the 1909 show were: President, Howard Elliott, St. Paul; first vice president, Harry J. Neely; second vice president and chairman of the board of trustees, E. F. Cartier Van Dissel; treasurer, W. D. Vincent; secretary-manager, Ren H. Rice; trustees, William McMurray, Portland; D. C. Corbin, Jay P. Graves, Henry M. Richards, N. W. Durham, J. P. McGoldrick, F. E. Goodall, David Brown, G. C. Corbaley, L. MacLean, Phil T. Becher, H. J. Shinn, Perry D. Tull and the executive officers.

The development of the national show idea has an interesting history. Early in the spring of 1908 David Brown, of Spokane, and a few acquaintances informally discussed a plan to determine which district on the continent raised the largest perfect apples. The idea met with a hearty reception and was formally taken up by the Spokane County Horticultural Society at its meeting in the assembly room of the Spokane Chamber of Commerce on April 4, 1908, when it was proposed to have an apple show the following fall. The Washington State Horticultural Association and the Spokane Chamber of Commerce enthusiastically endorsed the project and pledged their support. Changes followed rapidly as the idea was worked out, and from a county show it passed to an Inland Empire exhibit, and finally, by unanimous agreement of the various interests, it was decided to have an exposition of national scope and character. Organi-

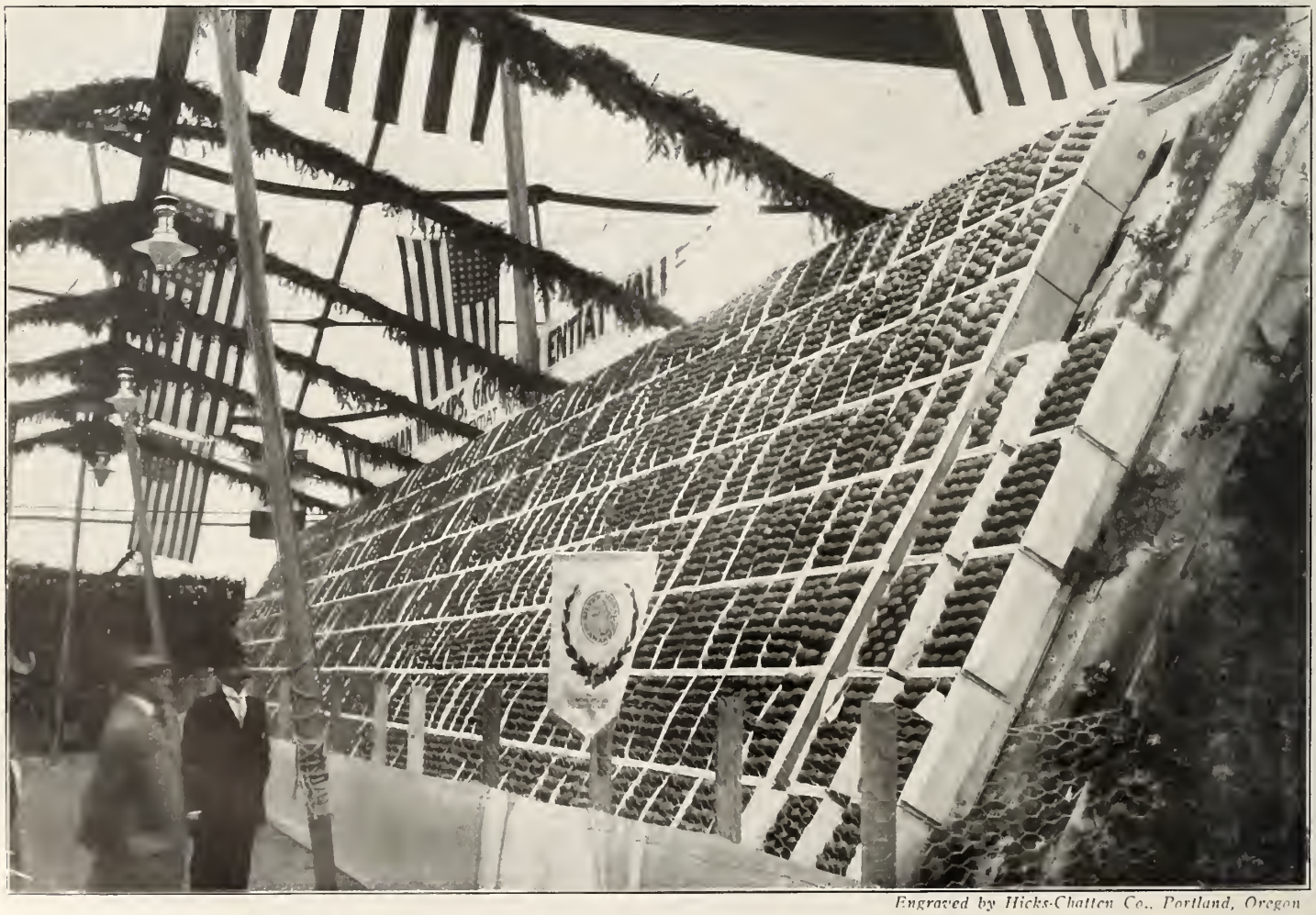

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EXHIBIT OF STAYMAN WINESAPS BY P. B. PACKWOOD, ENTIAT, WASHINGTON. WINNER OF SECOND PRIZE AT SECOND NATIONAL APPLE SHOW, SPOKANE, NOVEMBER, 1909

Engraved by Hicks-Chatten Co., Portland, Oregon

WINNER OF BEST MIXED CARLOAD EXHIBIT, BY J. F. McCURDY, TOPPENISH, WASHINGTON, AT SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, NOVEMBER 15 TO 20, 1909

zation of the National Apple Show (Incorporated), with a stated capitalization of $100,000, and these officers, followed:

President, Louis W. Hill, St. Paul; first vice president, L. F. Williams; second vice president, E. F. Cartier Van Dissel; treasurer, W. D. Vincent; secretary and manager, Harry J. Neely, of Spokane. Trustees, E. F. Cartier Van Dissel, chairman; F. W. Gilbert, St. Paul; William McMurray, Portland, Oregon; D. C. Corbin, Jay P. Graves, Henry M. Richards, N. W. Durham, J. P. McGoldrick, F. L. Daggett, David Brown, G. C. Corbaley, L. MacLean, F. E. Goodall and Phil T. Becher, Spokane.

The first show cost the people of Spokane in the neighborhood of $40,000, but while the exhibtion was an enormous success, the organizers faced a deficit of $3,500. This was promptly met by one hundred business men, each contributing thirty-five dollars. Every advertised premium, ranging from $1,000 for the best car of apples, to the prize for the largest apple exhibited, was paid the moment the judges made the awards.

Briefly stated, the chief objects the promoters of the show hope to attain by giving these expositions, which are free and open to the world, are:

To popularize the apple as a national fruit and food.

To assist growers in orcharding and the marketing of their products.

To encourage the growing of cleaner and better fruit, and more of it.

To supply the ever-increasing demand for high-grade commercial apples.

To demonstrate to the West the possibilities of intensive cultivation and to show to the East the value to the whole country of this development.

Engraved by Hicks-Chatten Co., Portland, Oregon

From left to right: W. D. Finley, assistant secretary National Apple Show; H. B. Tronson, Eagle Point, Oregon, winner of sweepstakes at National Apple Show, 1909; Michael Horan, Wenatchee, Washington, winner of chief prize in 1908; E. H. Shepard, editor and publisher "Better Fruit," Hood River, Oregon,

EXHIBITORS AT NATIONAL APPLE SHOW, SPOKANE

BY AUGUST WOLF

PROBABLY no more convincing arguments in behalf of apple growing in the Northwest need be put forth than those contained in statements made by orchardists exhibiting their products in competitions, open to the world, at the second National Apple Show in Spokane last month. These little documents are the personal experiences of men who started their orchards, after clearing away the rank sagebrush, and of others who took over tracts with growing trees. They show that modern conditions and demands have made apple culture a pleasant and highly profitable industry in the Northwest, also that intelligent effort and perseverance count for as much, if not more, in this land of opportunity than in any other part of the continent. They indicate, too, that the incomparable climatic and soil conditions in the Inland Empire were the chief factors in these successes, and they emphasize the fact that there is room for an army of growers, opportunities to establish many happy homes, chances to make millions of dollars, to develop varied resources and to have a part in the growth and progress of the country.

H. B. Tronson, of Eagle Point, Oregon, winner of the sweepstake of $1,000, and the first prize in their class with a car of Spitzenbergs, is a native of England, born at Devonshire. He came to America in the '80s, settling in Manitoba, where he served with the 90th battalion Winnipeg Rifles during the Riel rebellion. He went to southern Oregon three years ago from Portland, where he handled flour and jute for ten years. He former a partnership with E. F. Guthrie and they bought 126 acres of land, set to apple and pear trees, for $11,000. Afterward, they purchased 174 acres of raw land at a low figure. Their orchard, which is watered twice a year from Little Butte Creek, has increased in value to $60,000, and is not for sale. They have an ideal country home, which is cared for by two English servants, and their orchard, now sixteen years old, is one of the best in Oregon. From a five-acre tract they harvested 2,800 boxes of which 640 were sent to the Spokane show. The exhibit won $1,000 in prizes, was sold for approximately $2,000, a total of $3,000, while the cost, including picking, grading, packing and freight charges to Spokane, was less than $650.

W. W. Sawyer, of Sunnyside, who won the second prize of $500 and the first prize in class with a car of Grimes' Golden apples, went into the Yakima Valley six years ago, when he bought options on several tracts of raw land, also the young orchard from which he harvested the prize winning fruit. He was formerly a window trimmer and decorator, and recognized as an expert in his line, and as such he commanded a high salary in Chicago, Milwaukee and Portland. Believing that orcharding offered a better future and better remuneration, he started to develop a tract and met with success from the beginning. His holdings in the Sunnyside district could not be bought for $100,000 today. Mr. Sawyer not only regained his broken health, but also made thousands of dollars where he earned only

Engraved by Hicks-Chatten Co., Portland, Oregon

EXHIBIT OF YELLOW NEWTOWNS BY CHARLES POPE, ASHLAND, OREGON. SPECIAL AWARD OF HONOR AT THE SECOND NATIONAL APPLE SHOW, SPOKANE, NOVEMBER, 1909

Engraved by Hicks-Chatten Co., Portland, Oregon

WINNER OF FIRST PRIZE OF $250 IN WAGENER CLASS. WON BY C. E. ATKINSON, OF GREEN BLUFFS, WASHINGTON, AT SPOKANE NATIONAL APPLE SHOW, NOVEMBER, 1909

hundreds before in his profession. He attributes his success to watching the details of his new business and the fact that his orchards are in a district which is the natural home of the king of fruit.

E. C. Hill, of Selah, Washington, winner of the third in the sweepstakes and second prize on carload of Spitzenbergs, said:

"I have been in the orchard business only two years, yet I am convinced that it is the best paying industry in the United States. I paid $650 an acre for my eleven-acre orchard and would not sell it today for $1,000 an acre. I harvested on an average of 225 boxes an acre and sold them at $2.75 a box. I also have nine acres in plums, pears and peaches. The orchard is irrigated by a gravity system and is located near Selah, where there are plenty of opportunities for young men who are willing to work hard for the start."

J. F. McCurdy, of Parker, Washington, winner of first prize in the mixed carload class, located in the Yakima district seven years ago. He came from Shennandoah, Iowa, near which city he raised corn and hogs. He paid $16,000 for 164 acres of the raw land in 1902, planted 144 acres to orchard and other crops, and will this fall plant the rest of the tract in winter apples. He said:

"Money could not buy my home. I have refused several offers of $1,000 an acre for the whole or part. The oldest bearing orchard netted me $1,200 an acre this year. The carload lot on exhibit brought $2 a box, and eleven acres of prunes sold on the trees for $6,397. One pear tree, a DeAnjo, brought $74 two years ago, and the fruit sold for $54 this year."

V. C. Cameron, of Farmington, Washington, winner of first prize with Rome Beauty apples, came to the Northwest

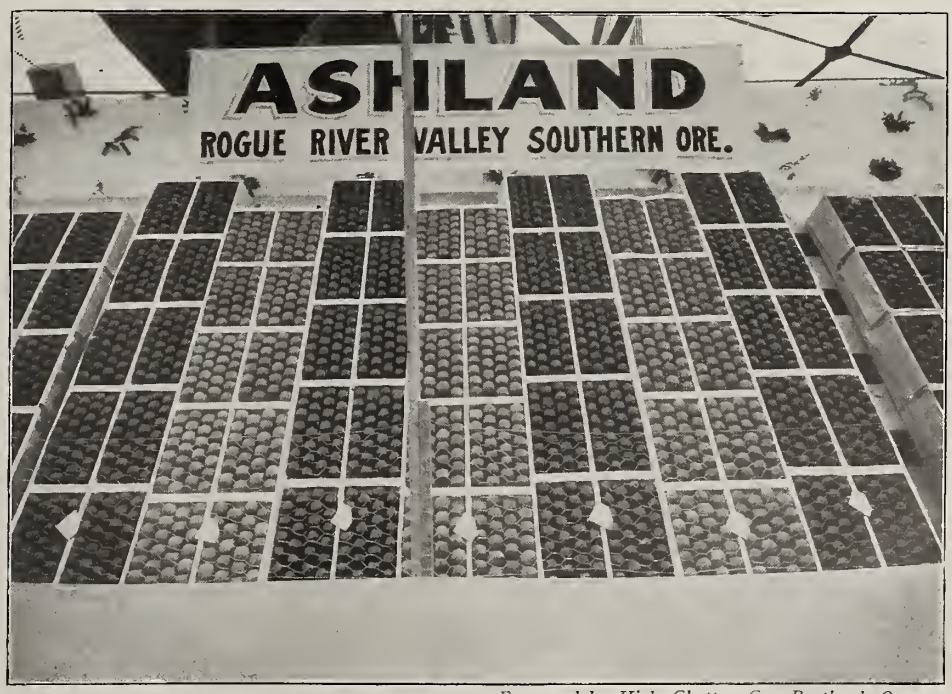

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EXHIBIT OF ASHLAND, IN THE ROGUE RIVER VALLEY, SOUTHERN OREGON, AT THE SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, 1909

Engraved by Hicks-Chatten Co. Portland, Oregon
EXHIBIT OF THE CHELAN COMMERCIAL CLUB, LAKE CHELAN, WASHINGTON, AT SPOKANE SECOND NATIONAL APPLE SHOW, 1909

six months ago from Michigan, where he was engaged in the raising of peaches and small fruits. A visit to the Inland Empire convinced him that Nature had intended this for the great orchard district of the world. He purchased eighty-six acres, all in orchard, at $250 an acre, and his sales this fall have been so profitable that he now refuses $500 an acre for the same land.

"I am raising Rome Beauties, Mammoth Black Twig and Spitzenbergs," he said, "and the car of Rome Beauties at the apple show I consider to be one of the finest lots ever packed. All my apples are raised on non-irrigated land, although I think some improvement might be made in certain varieties by irrigation. I have sent literature and letters to many of my friends in Michigan, advising them to come to this wonderful country."

R. P. Wright, of Chelan, Washington, who won numerous prizes, including a carload special, with his exhibits totaling 737 boxes, told an interesting story of his experiences in the orchard business. Like many other farmers in Nebraska, he was striving to make a decent living at general farming on 160 acres of land. He gave it up and, with his wife and twelve children, migrated to the Chelan country ten yers ago. He purchased eighteen acres at $25 an acre, planted it to orchard and has since refused $10,000 for the tract. He sold his crop for $1 a box on the trees last year. Rome Beauty and Yellow Newtown are his specialties and he has several acres of the finest peach trees in the state. The land is irrigated by a private gravity system.

Joseph A. Bourgaize, of Zillah, Washington, winner of second prize with a car of Rome Beauty, had a most remark-

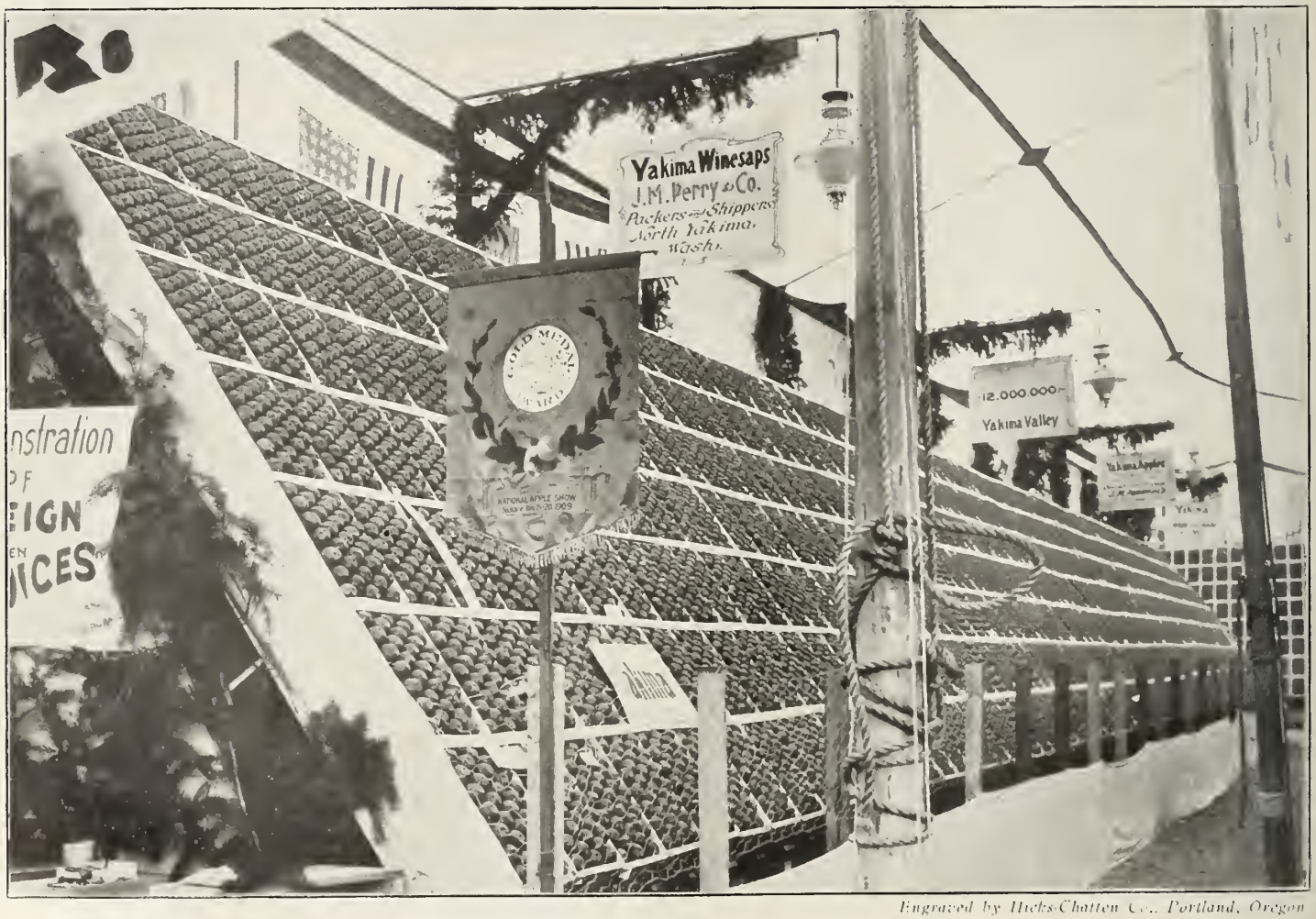

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EXHIBIT OF WINESAPS BY J. PERRY, NORTH YAKIMA, WASHINGTON. WINNER OF FIRST IN CLASS AT SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, NOVEMBER, 1909

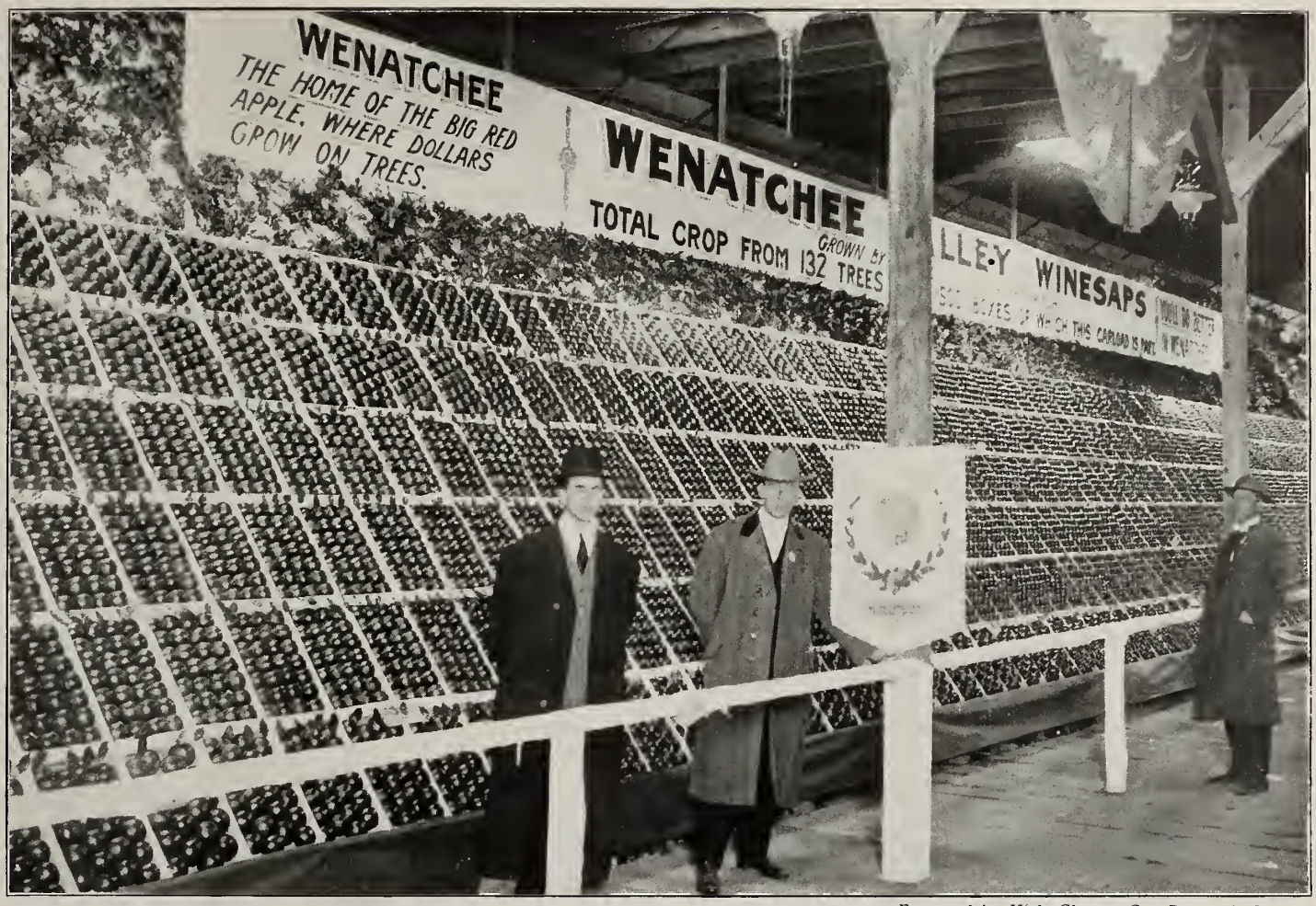

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EXHIBIT OF WINESAPS BY JOSEPH NESSELS, WENATCHEE, WASHINGTON. WINNER OF SECOND PRIZE IN CLASS AT THE SECOND NATIONAL APPLE SHOW, SPOKANE, NOVEMBER, 1909

ably successful career in apple raising. He came to Spokane from Montana ten years ago, with little money, but lots of energy and faith in the future of the Inland Empire. His first venture was to buy fifteen acres twenty-five miles southeast of Yakima, on which he made a payment of $500. He tells how he planted and marketed vegetables until his orchard came into bearing, making payments from time to time, until last year from ten acres he sold $6,000 worth of apples, while for the products of one acre he received $2,100. He said:

"My land is now worth more than $2,000 an acre. I marketed 2,500 boxes at $2.50 a box this year. Most of the tract is irrigated by the Sunnyside government project and several acres are planted to peaches, plums and other fruits that bring a substantial income."

H. M. Gilbert, of North Yakima and Toppenish, former president of the Washington State Horticultural Association and one of foremost orchardists in the Northwest, who won the first prize for the best district display grown on irrigated land, was winner of the second prize in the carload sweepstake in 1908. He came from Illinois sixteen years ago and started an orchard on twenty acres of land where there was sagebrush in 1898. He owns 500 acres of land, of which 400 acres are in orchard, two miles west of North Yakima. The land is irrigated by private ditch. The land cost forty dollars an acre, but he has repeatedly refused $3,000 an acre. He is also interested in a tract of 1,000 acres under the Tieton Canal in the Yakima Valley. He took 3,200 boxes of Winesaps from two and a half acres this year, and sold them at $3.00 a box. The car of 630 boxes of Winesaps exhibited last year represented one-fifth of the crop grown on three and

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EXHIBIT OF PROSSER, WASHINGTON, IN THE YAKIMA VALLEY, AT SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, NOVEMBER, 1909

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FLORENCE, MONTANA, EXHIBIT FROM BITTER ROOT VALLEY, THE "HOME OF THE McINTOSH RED," AT SPOKANE NATIONAL APPLE SHOW, 1909

a half acres of eight and ten-year-old trees.

J. M. Perry, winner of the Elliott Special with a car of Winesaps, went to the Yakima Valley from Maine ten years ago. He said:

"I bought fifteen acres of one-year-old orchard land for $200 an acre. Today it is worth more than $2,000 an acre, as it has brought me a net income of better than $5,000 every year for the last six years. My land is irrigated and this year, on a less than average crop, I received something over $4,500. I believe this is the greatest country in the world for the eastern orchardist, or for any other man looking for an ideal home."

"Do a little figuring for yourself," said Thomas Halloway, of Florence, Montana. "I am raising McIntosh Reds and strawberries. We have mighty good land and climate over in western Montana, and the figures I give you will prove it. I raised 8,500 quarts of strawberries on an acre in 1908, there were twenty-four quarts to a crate and I sold them for $1.25 a crate. I sold the McIntosh Reds in a seven-year orchard for $1.50 a box. I came to this country fourteen years ago from Boone County, Iowa, and preempted the land. Today I would not sell it for $200 an acre, orchard and raw land combined."

Charles Pope, formerly of Colorado, who went to Ashland, Oregon, in 1894, was the exhibitor of a car of Yellow Newtowns, which would have been well up in the awards had it not been for the fact that his fruit reached the grounds too late to unwrap the top layers. Mr. Pope paid $500 an acre for his orchard and $135 for unimproved land. Today he would not sell for less than $2,500 an acre. Last year's record was 600 boxes an acre. They sold at $2.50 a box. In addition, an enormous crop of peaches

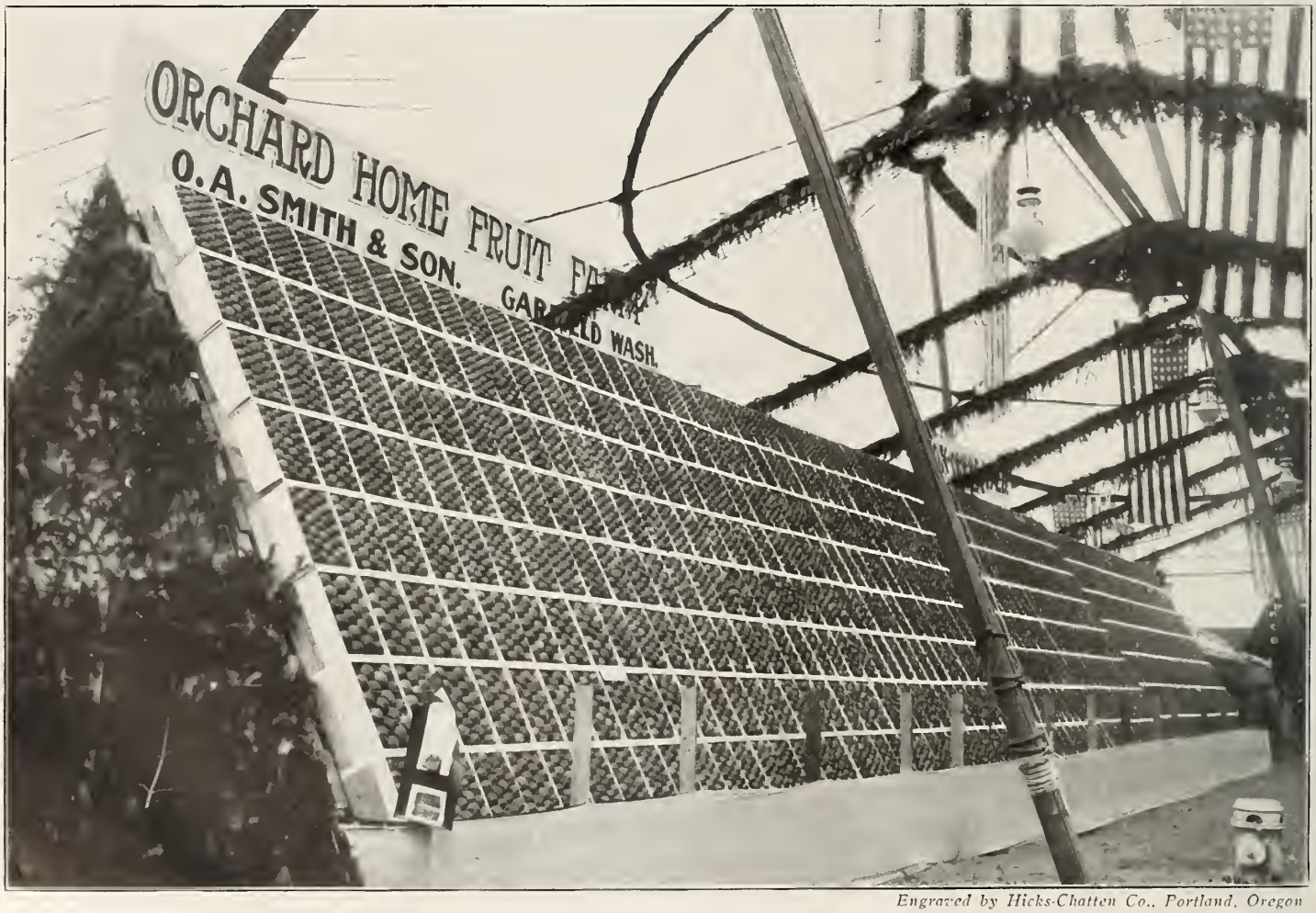

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EXHIBIT BY O. A. SMITH & SON, GARFIELD, WASHINGTON, AT SECOND NATIONAL APPLE SHOW, SPOKANE NOVEMBER 15 TO 20, 1909

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EXHIBIT OF ROME BEAUTIES BY R. P. WRIGHT, CHELAN, WASHINGTON. SPECIAL AWARD OF HONOR AT THE SECOND NATIONAL APPLE SHOW, SPOKANE, NOVEMBER, 1909

sold at fifty cents net on the tree. "And," Mr. Pope added, "we are getting more money every year."

William Critzer, of the Wild Rose Orchards, sixteen miles north of Spokane, came from Montana eight years ago. Before that he farmed in Kentucky. His story is interesting. He says:

"For years I toiled in the mines and woods in Montana and finally landed near Spokane with $500, three head of horses and a cow. I bought eighty acres of land on Wild Rose prairie for $1,700 and made a living from the vegetables grown between the orchard rows. Last year I cleared $2,000 from seven acres of fruit and $1,200 from the rest of the farm planted in vegetables and grains. I sold the greater part of my land for $150 an acre, and I believe that $500 is a fair price when set out in orchards. It took me twelve years to accumulate $1,000 while working for wages, while in the orchard business I cleared $20,000 in eight years."

Joseph Nessel, of Wenatchee, winner of the second prize in the carload class for Winesaps, said:

"I came from Montana four years ago and picked out a little piece of orchard land, for which I paid $400 an acre. My land lies just one mile west of the city of Wenatchee and is getting more valuable each year, not only because my orchard brings me in a good revenue, but because land is increasing in value. I have refused several offers of $2,500 an acre for ten acres."

C. F. Fullerton, of Otis Orchards, twelve miles east of Spokane, who came from Rock Island County, Illinois, four years ago, said:

"I paid $125 an acre for my land, planted it to orchard, and the income now warrants me in asking $2,000 an

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HUNTERS VALLEY, WASHINGTON, DISPLAY AT THE SECOND NATIONAL APPLE SHOW SPOKANE, WASHINGTON, NOVEMBER, 1909

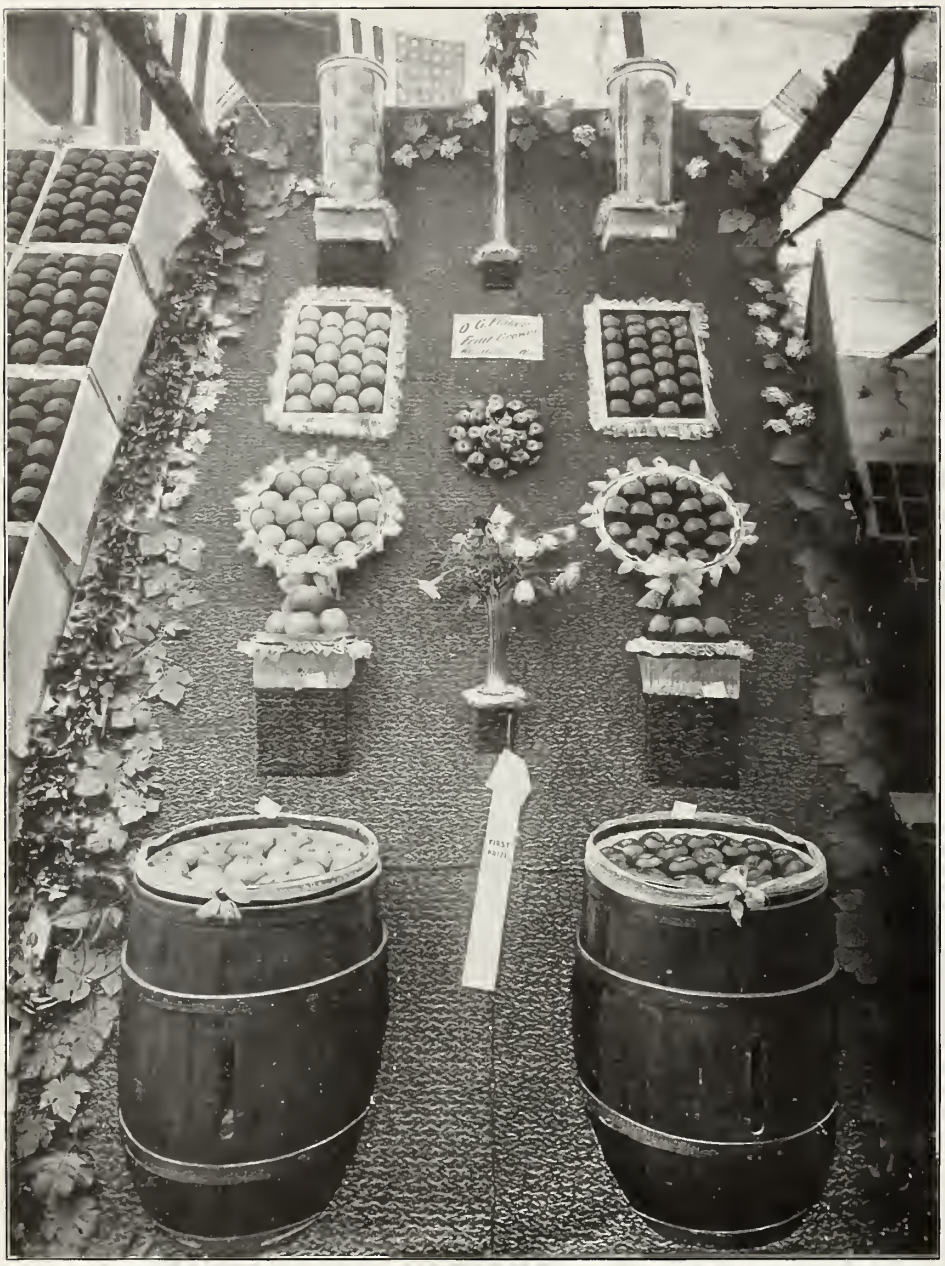

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EXHIBIT BY O. G. FRANCE, WENATCHEE, WASHINGTON, WINNER OF FIRST PRIZE LIMITED DISPLAY, SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, 1909

acre. My land is irrigated by a gravity system from Newman Lake. I sold my exhibit apples for $4 and $5 a box. My crop at the orchard averaged $2 a box. I would earnestly advise any one seeking an ideal occupation to come to this country and investigate the apple industry, as the Inland Empire will one day be the world's orchard."

H. S. Simmons, a pioneer grower of the Wenatchee district, homesteaded on sixty acres a mile south of Wenatchee in 1886 and has experimented on almost every variety of apple known. His individual district display at the show was one of the features of the exhibition. He said: "I value my land at $2,500 an acre, and would not sell at that price. There were only three orchards in the Wenatchee Valley when I settled there. I would advise young men to go into the Upper Columbia country and grow up with the new territory. It is going to be a second Wenatchee in five years."

P. Erickson went to Portage, Vashon Island, Washington, two years ago from Nebraska, where he was a farmer. He bought twenty-five acres of land for $350 an acre and today values it at $2,500 an acre.

"My reason for putting that price on the land," he said, "is because it brings an income on a greater investment. I grow fifty-three varieties of apples and take two crops of strawberries from the land between the rows of walnuts and peaches. I received $1.23 a crate for the berries and averaged 263 crates to the acre in 1908. From an acre of two-year-old vines I picked 566 crates. The land is not irrigated."

Richard Ball, an orchardist in the Methow Valley, in Okanogan County, won six firsts and two seconds. He exhibited the largest apple in the show. It weighed forty-one ounces and was seventeen and one-eighth inches in circumference. He came from Colorado three years ago, where he thought the finest apples grew. He says:

"I paid $100 an acre and today would not sell for three times that amount. I raise the finest pears and peaches you ever saw and they bring the top price on the open market. The Okanogan country is the coming district, in my opinion, and I would advise Colorado orchardists to visit our district if they want to get into the real business of raising fruit."

Michael Horan, of Wenatchee, who won the sweepstake with a car of mixed apples in 1908 and was awarded a prize of five acres of land for his ten boxes of Spitzenbergs this year, was formerly a horse breaker in California, whence he went to Massachusetts. When he went into Chelan County he engaged in stock raising. He had no practical knowledge of fruit growing until a few years ago. His trees were set out in 1900, when land was worth about $100 an acre. He refused offers of $2,000 an acre or $100,000 for his fifty-acre orchard last year, and says he would not take $250,000 for it today.

O. A. Smith, of Garfield, Washington, winner of the International Apple Shippers' Association's silver trophy for the best commercial pack and grading, purchased his thirty-four-acre tract, half of which is set to orchard, for $275 an acre last June. Today he would not take $1,000 an acre. The land is nonirrigated, yet is prolific and profitable.

"I came direct from Minnesota and got my money down on the first good thing I saw," he said, "and I only wish I had money to purchase more of the same land adjoining my place."

"Fifteen years ago I bought twelve acres of land from the Northern Pacific Railroad Company for $5 an acre," said C. E. Atkinson, of Green Bluff, Spokane County, winner of first prize in the Wagener carload special. "Today I would refuse $400 an acre. I am located fifteen miles northeast of Spokane, and believe the future looks too bright to part with my land at any price. My land is not irrigated, but I raised 100 crates of strawberries on an acre and marketed them at $2 a crate last year."

Dr. J. G. Pogue, of Omak, Washington, homesteaded his land twenty-two years ago, and while experimenting with different varieties of apples he has watched the country grow. He is enthusiastic over the future of Omak and the adjacent territory and predicts that with the opening of the Great Northern road next year values will more than treble in the river country. On receiving third prize in the five-box exhibits of Grimes Golden the fruit was sold to James J. Hill for $10 a box.

Benjamin Ross, a grower at Omak, came to Washington ten years ago from Illinois, where he was a civil engineer. He homesteaded 160 acres and planted several acres to orchard. He sold $19,000 worth of land and still has forty acres within the present city limits of Omak. Wageners, Rome Beauties, Greenings and Winter Bananas brought a golden reward for Mr. Ross and made possible his story of success.

B. L. Smith, who had been for twenty years in the orchard business in Colo-

Continued on page 57

EASTERN MAN'S OPINION OF SPOKANE APPLE SHOW

PROFESSOR H. E. VAN DEMAN, of Washington, D. C., chief judge, sent the appended letter to the officers of the National Apple Show (Incorporated) at the close of the exposition in Spokane:

That the apple show was a notable success is beyond a doubt, and this is owing to two things:

First, is the enterprise of the people of Spokane, who have done everything that could be done within reason to give the fruit growers of the Northwest a chance to show the kind of apples they are growing and how they prepare them for market.

The other, and most important of all, is the noble spirit of the apple growers themselves. They have in many cases sacrificed their own personal interests to help make the show, and they had to take chances on whether they would get any remuneration whatever, except the knowledge they would gain. To hold an apple show without the growers would be like fighting a battle without soldiers.

There never was such an apple show in all the history of the world, and there may never be another as good, but we hope there will be far better ones in the future, and that there can be, anyone with their eyes open can see. The country, North as well as South, can and does produce apples of the highest grade grown anywhere in all the world, and they are learning better and better every year how to grade and pack them for market.

My great regret is, that it was not possible to award far more and larger premiums to the exhibitors, for they richley deserved them, and especially is it to be regretted because of those who came out behind in the race. There may have been mistakes made, but in view of the immense number of entries that had to be carefully examined, and the short time in which it had to be done, it was impossible to always give the full measure of attention that the exhibits really deserved, and it would be a wonder if some things were not overlooked occasionally; but with scarcely an exception, the exhibitors have taken their defeat stoically and gracefully, and are willing to try again. This is the spirit that pushes the world along, and ever upward.

To the neighbors from British Columbia, my friendly feelings go out in particular, for they made grand exhibits and their apples were good, very good; but geography had no consideration whatever, nor had friendships. Before the apple show, I think every member of the jury had friends on both sides of the international boundary, and I hope we will have even more afterwards, but during the apple show we had no friends so far as the exhibits were concerned; the scorings placed the awards.

The Montana people stood at a considerable disadvantage, because their climate does not permit them to grow the same varieties to the same perfection that is common in Washington and Oregon. The Eastern apples from Maine, Virginia, New York and North Carolina had the additional disadvantage of the trip across the continent and the rough handling that they get in the hands of the express companies, but there was an evident contrast in the color, size, and general appearance of the fruit as compared with that grown on the Pacific Coast, and every experienced person who has seen the apples from both regions knows this very well.

The jury was made up by me from the knowledge I have of the pomologists of America, and if I had it to do over I do not think I could have done better. The four assistants were absolutely impartial and unbiased, and all are men of long experience in growing and exhibiting apples, as well as in judging them. The insinuation made in one of the local papers about the judge from Oregon having thrown his influence in favor of the car of Spitzenbergs from Medford, which got the great sweepstake prize, was slanderous and untrue. He did not come from that part of Oregon but from the Hood River section, and had no shadow of interest in the matter except to do what was perfectly fair. The high quality of the Spitzenburg apples and the superior pack, gave the decision. The car of Grimes came next, which was from the Yakima Valley.

Some of the lessons that may be learned from this apple show ought to be lasting. One is, that quality should have a great deal to do with the winning, not only in exhibitions, but in the market. The eating of apples is their greatest and final test; an apple that is not worth eating is not worth having, and the higher it ranks in quality, the more it is worth while. We can and do grow the best apples in the world, and our people can and should have such to eat, and we can also produce large quantities to help supply the rest of the world.

Ben Davis and other low-grade apples may and will be grown in the Eastern and Central states, but they will always have to take an inferior position in the markets of the world, as they do now.

Rating as to relative quality, as given

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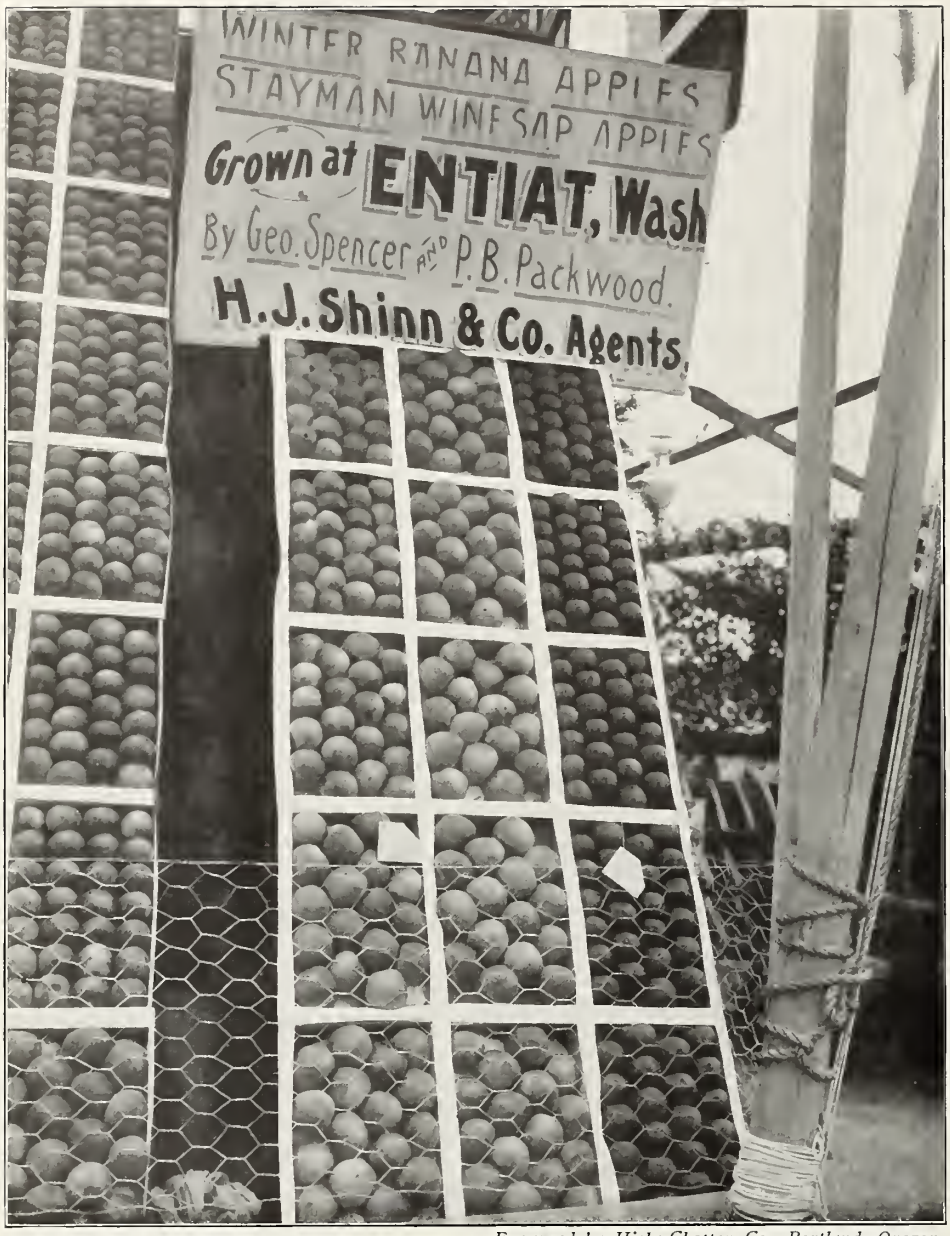
KOOTENAI COUNTY, IDAHO, EXHIBIT AT SECOND NATIONAL APPLE SHOW, SPOKANE



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WINTER BANANA AND STAYMAN WINESAP APPLES GROWN AT ENTIAT, WASHINGTON BY GEORGE SPENCER AND P. B. PACKWOOD, AT SECOND NATIONAL APPLE SHOW SPOKANE, WASHINGTON, NOVEMBER, 1909

by the American Pomological Society, has this year been put in force here. This was not the case last year, and there was a strong desire expressed by many of the Western growers that it should be applied in the judging. This is a commendable feature, and while there may be some mistakes in some of the values that are given on the list, on the whole it is quite just.

Another lesson that may be learned, is in regard to the diagonal pack as an advanced step over the square pack. That is, that the apples should be so placed in the boxes so that they shall lie one between three others, rather than one on top of another, as must be the case with the square pack; for when the lid is pressed down to make the apples firm within it, one apple will bruise another more or less, and sometimes very seriously. Apple packing is an art, and a high art, when it comes to placing the fruit on the market to the best possible advantage. There are many variations of this diagonal pack, to suit the apples of different sizes and shapes, and two forms of boxes are necessary to include them all, although they contain within a very few cubic inches of the same packing space.

One very dangerous enemy was discovered in my examination of a barrel of apples from Maine. They were of the famous Nod Head variety, which is properly called Jewett, and is a favorite with all the New England people. The specimens were fair enough externally, but internally they were anything else, because they were simply riddled with holes made by the apple magot, known scientifically as pommella. It is prevalent in all of the New England states, and to some extent in New York, Ontario, Michigan and Wisconsin, and is evidently marching westward. While the coddling moth is bad, this is very much worse, because there is no known means of successfully combatting it. An insect lays its eggs just under the skin, and in such a way that no poison can reach them nor the little worm that hatches out. The only way to kill these pests is by picking the apples as they drop and destroying them utterly, and this is not practical, because the time between the falling of the fruit and the exit of the insects is so short that millions will escape.

This barrel of apples was seized by the local inspectors as soon as I discovered the presence of the enemy, and long before these lines were written, the whole mass was cremated. The greatest care should be used that no apples are ever introduced to this part of the country from the regions already named for fear of introducing this insidious and very destructive insect. Even the lunch baskets should be guarded, for history states how many of our worst troubles have come upon us in some such insignificant way.

If I may be allowed to express a personal opinion, I would like to say, with all esteem for the people of Spokane and the West generally, that the next apple show be held in Chicago. That is the place to exploit the American apple, and especially the western apple. A thousand persons will see them there who ought to see them, to one such person who will see them here. They will learn not only about the apples themselves, but will get suggestions about how and where to grow them. Every apple on exhibition should go East anyhow, and the prospective buyers will be there to see them, and the growers will get more out of their apples in Chicago than they possibly could here, including the freight charges. On the whole, it will be far better for the western growers to show in Chicago than anywhere else that I could think of. The growers of the central and eastern states can have a fair opportunity to show their apples, which cannot be the case here,

While the present apple show has represented many of the leading fruit sections of the Northwest, there are others equally good that were not represented; and there are beautiful fruit lands now lying practically untouched, that is, whole sections comprising millions of acres that are just as Nature left them. One region known as Horse Heaven, which lies parallel to the Yakima Valley and is about seventy-five miles long and about twenty-five miles broad, and now has not an apple tree on it, may be transformed into an apple heaven, and water will do it. This water now lies in the snows of Mount Adams, and all that is needed is money, guided by the hand of man, to lead it down the rocky slopes, across the gulches and on to the beautiful, level-lying and fertile table lands where now dry farming is the only means of securing anything from the soil. And this is only one of the many sections of like character, several of which I have seen and know by personal experience to be awaiting development, to be changed into lovely homes, filled and surrounded with every comfort of life. And the water in its descent may and will be turned into power which shall be changed by electricity into lights and heat that shall serve almost every purpose for which now fuel is used.

JUDGING THE NATIONAL APPLE SHOW AT SPOKANE

BY PROFESSOR H. E. VAN DEMAN

DURING the third week in November there was held at Spokane, Washington, the Second National Apple Show, which was by far the largest thing of the kind ever seen in the history of apple shows. It is estimated that if all the apples shown had been spread out one deep, they would have covered five acres of surface. As the duty of taking the leading part in judging this immense lot of apples fell upon me, there were several points that impressed me forcibly, and perhaps some of them may be of more than passing interest to fruit growers and others. Indeed, some of the exhibitors may not fully understand the plan of judging, and if they did, it might be not only a satisfaction to know where th y gained or lost, but an advantage in future exhibits and in the general preparation of apples for market.

Almost the whole trend of the apple show was in the direction of proper marketing of the fruit. Indeed, it is fully half of the battle to get the full value out of the apples after they are produced, and the wise grower will give heed to the lessons taught by the recent show.

While the single judge system has come into vogue in nearly all fairs, it was impossible for one person to examine and pass upon the merits of more than a small part of the extensive and complicated exhibits. Therefore, I selected four gentlemen to assist in the work. Each one has had abundant experience not only in judging, but in growing apples and exhibiting them during many years past, and the troubles to be met in the different capacities were not new to, or unappreciated, by them. The work was divided up so that each judge had certain parts to examine and decide upon, but in some of the more important cases several of us acted jointly, comparing notes and views as to the merits. The outcome appears to me to have proved the wisdom of the plan, and the selection of the judges as well, and had I the opportunity to again do the choosing it would not be different.

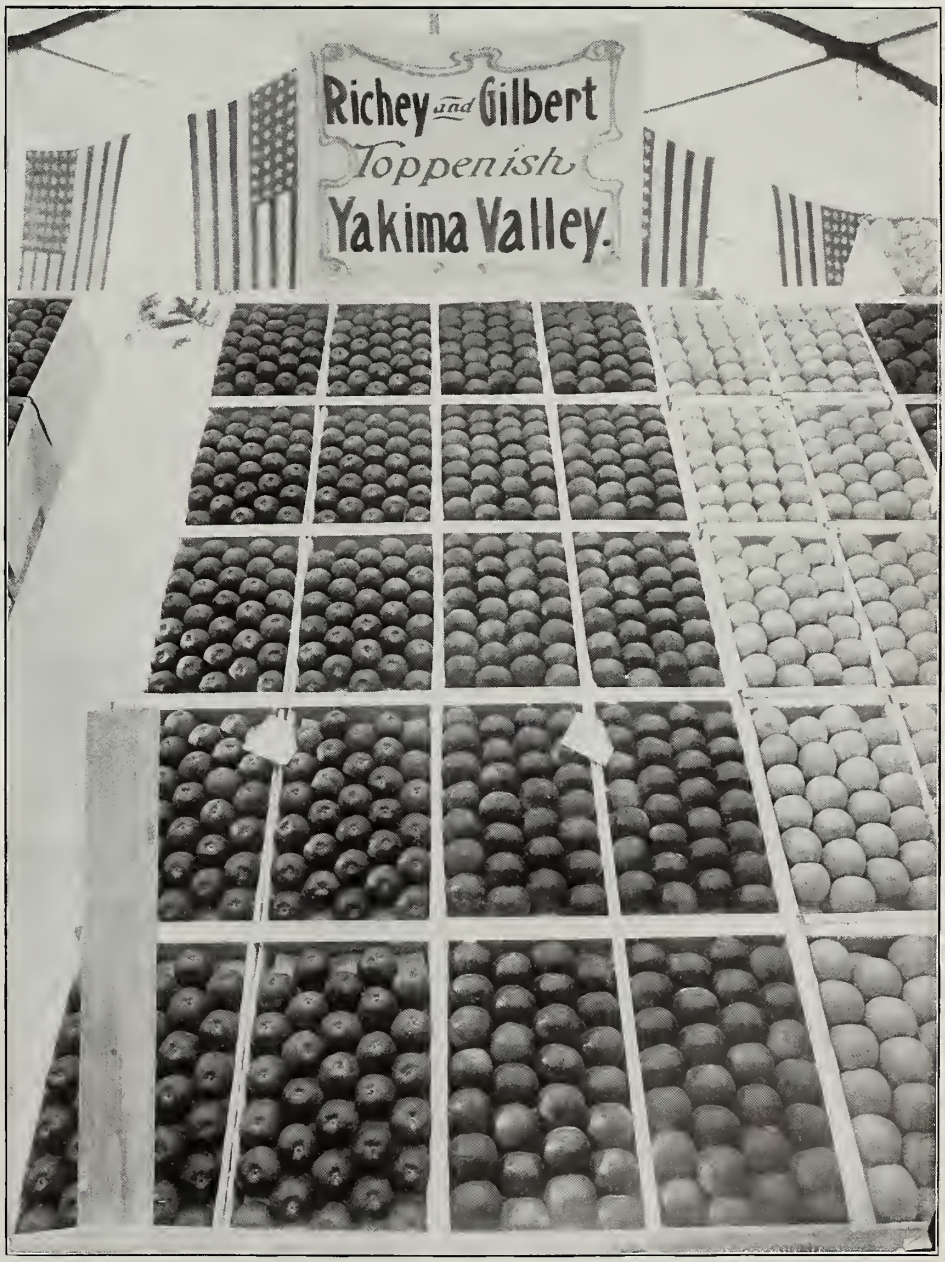
The rules as laid down by the management of the apple show were wise and just, and some of them were especially so, and in some cases entirely new, so far as I know.

The adoption of the standard as to the quality ratings given varieties by the American Pomological Society, is one of these. There are differences of opinion among all informed pomologists about the grading as to quality of some of our standard varieties, but these differences are largely compromised in the list given by the above-named society, and on the whole, they are about right, although I think a few of them need changing, and it will be my effort to have this done. And some new names should be added to the list, while some may deserve dropping out altogether.

One rule permitted the judges to change the names attached to specimens entered for premiums that were wrong, give them the right names and make awards on the same. This worked out very satisfactorily in several cases, and helped the exhibitors to properly understand the names and get the just benefits of their efforts at exhibiting as well. This is especially true of the single plate exhibits.

The judging of the carload lots, which were at least the most spectacular of all the exhibits, was done by the united opinions of all the five jurors, while the scoring of "the pack" was given largely into the hands of Mr. A. P. Bateham, Mosier, Oregon, who is one of the most critical packers of the Hood River section. All of us gave our attention to this point and to all phases of these exhibits. As the Hood River people had no apples whatever at the show, and Mr. Bateham is above all reproach, there could not have been more disinterested or more skilful judging done. The awards proved all this to have been worked out on the basis of the score card as arranged and published months before the exhibits were put up. High quality of the fruit, the most advanced styles of packing skilfully done, and the best condition won the highest awards. It was a matter of mere addition to place the awards after the apples as shown had been compared with the schedule laid down on the score card and put on record.

A statement of the score card as given for apples in boxes, might be of assis-



Engraved by Hicks-Chatten Co., Portland, Oregon

PRIZE WINNING TEN-BOX EXHIBIT BY RICHEY & GILBERT, TOPPENISH, WASHINGTON AT SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, 1909

tance here in explaining what standards were adopted.

SCORE CARD

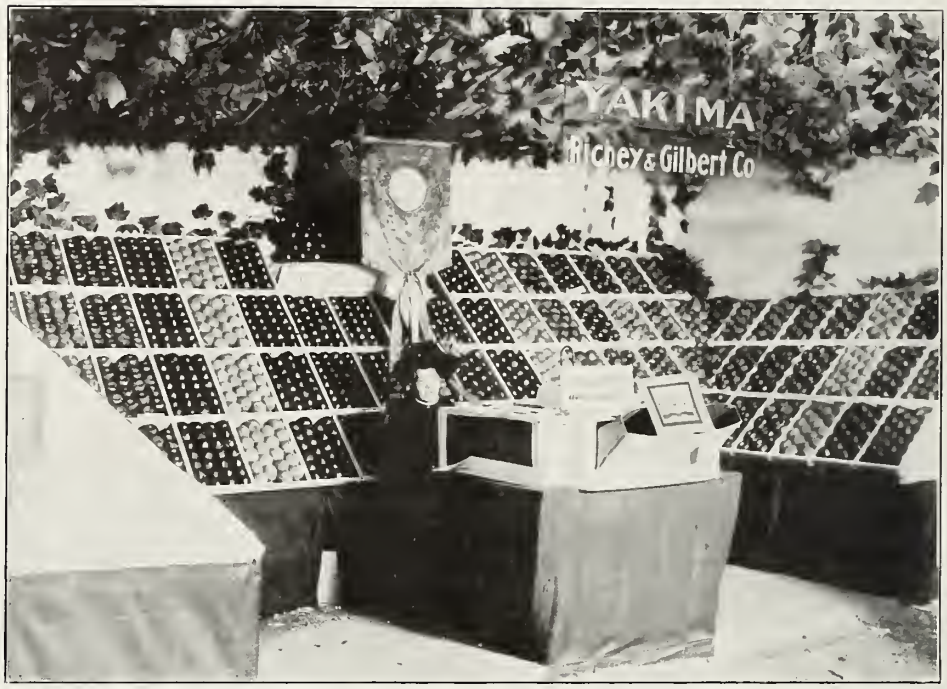
	Points
Quality	20
Color	20
Size	10
Uniformity	10
Condition	20
Pack	20
Total	100

PACK (BOX)

Bulge	4
Alignment	4
Height at ends	4
Compactness	4
Attractiveness and style of pack	4
Total	20

Quality, color, condition (meaning freedom from blemishes of all kinds, and not the state of ripeness) and pack, are all given equal and the highest values, twenty points each, size and uniformity only getting half as much. The pack will be noticed as having been divided into several points, four of each being given for the several exponent parts of the score, making twenty in all. All of these points go to make up a package that will be good in every way and bring the best price possible on the market and please the consumer, who is the final arbiter of the true value of the fruit. If apples are not pronounced good when they come to be eaten, they never were good and should not bring the price of good apples. And they must be attractive to the purchaser or they will not bring his money. That is why good color and a close and beautiful style of packing are so needful. A box, full from top to bottom in their grade throughout, will advertise itself far better than all the talk that a sharp dealer can give it.

The matter of style of pack cuts more of a figure in market than some wish to admit. We of the jury took the stand that the diagonal pack, with its variations, is the proper one, and we scored down one point on all square styles. The reason for this is, that the apples lie one between or upon three others, when packed in diagonal or alternate rows, while in the square pack, they lie one directly over another, touching in one point only, so that when the lid is forced down, as it must be to make the contents tight, each apple is bruised, more or less, on its two opposite sides. With the diagonal styles, they fit together snugly and bruise but slightly. As to the difficulty of making the two packs, those who are engaged in the work say they are equal in this respect; therefore, if one is no harder to make than the other, and the diagonal plan is the better, why not follow it? The advanced packers have taken the step and we of the jury simply followed them in our decisions, in the hope of inducing others to keep pace with the leaders and be up with the procession ourselves.



Engraved by Hicks-Chatten Co., Portland, Oregon
FIRST PRIZE DISTRICT DISPLAY, EXHIBITED BY RICHEY & GILBERT, NORTH YAKIMA WASHINGTON, AT SPOKANE NATIONAL APPLE SHOW, 1909

As there were almost no barreled apples shown, there was next to no judging in this line. There was one barrel of Jewett, commonly known as Nodhead, from Maine, that was a disgrace to the apple business. It was badly infested with the most deadly and insidious pest the apple has, the apple maggot, a species of minute insect that tunnels all through the flesh and cannot be killed by any means known, except gathering the infested fruit and destroying it in the egg or larvae stage.

There were a few barrels from New York, Virginia and North Carolina, which showed to bad advantage beside the higher colored, cleaner, and much better graded specimens of the same varieties of Western growth, but I know there are better apples grown in the East than those shown, and better grading and packing done than was represented at the Spokane National Apple Show; but the world needs to be shown, and the Eastern growers and packers seem slow to learn to put up a clean, honest and tasty apple package. If they have the apples, why do they not put them up so they may get an even price with the Western growers?

The regrettable part of the recent apple show on the part of the judges is that nearly all the exhibits could not have had awards, for they richly deserved them. We simply had to choose out of the many only a few of the best.

Engraved by Hicks-Chatten Co., Portland, Oregon
PRIZE WINNING APPLES OF SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON SENT TO PRESIDENT TAFT AND KING EDWARD BY GROWERS AND TRUSTEES OF SHOW
Frederick E. Goodall, president Spokane Chamber of Commerce, on the right; William D. Finley assistant secretary National Apple Show, on the left

THERE ARE NO COMMERCIAL ORCHARDS IN EUROPE

IN HIS address before the state horticultural meeting in Spokane, Professor John Craig, of Cornell University, said:

"I was in Europe for about eight months not long ago, and while there was able to make observations relative to market conditions. Now, it is often said that the apple crop is likely to be overdone in this country. I think that some of our eastern friends last year were inclined to think so when you people from Washington and Oregon came in and captured the eastern markets so completely.

"The greatest apple crop we have had during the past ten or twelve years was that of 1896. The crop that year totaled, I think, 39,000,000 barrels in the United States. The average apple crop since that time has not exceeded 38,000,000 barrels per year. The apple crop this year I do not suppose will run as high as 30,000,000 barrels. It is rarely that we get a big crop all over the country in the same year.

"Looking at it merely from the standpoint of the ratio of increase in product, I do not think that there is any cause for fear whatever. We should take into consideration the ratio of increase in the consuming population.

"In considering the European market for American fruits, we must bear in mind that there are no commercial orchards in Europe. This is a broad statement, but, as a matter of fact, there are no commercial orchards in Europe such as we know of in the West and East. Orchards may be cultivated there but it is as an exclusive crop. Small numbers of trees are grown, but not for commercial purposes. The 'amateur' system is thoroughly imbued in the European mind, and it is going to prevail there for a long time, for the old country people are slow-moving.

"The German government at this time is making a careful study of apple growing methods in this country. They are bringing the facts home to their own students, and trying to establish in their own colleges the teachings of American methods, but thus far with no results. I do not look for any great increase in the output of apples in Europe in years to come. Their system of orcharding will not be changed.

"Much of the American fruit that goes to Germany is landed at Hamburg. There it is received, examined right on the dock, and from the dock is taken to the auction room. Fruit auctions are held the year around in that city, as they receive orchard products from all parts of the world that ripen at all seasons of the year.

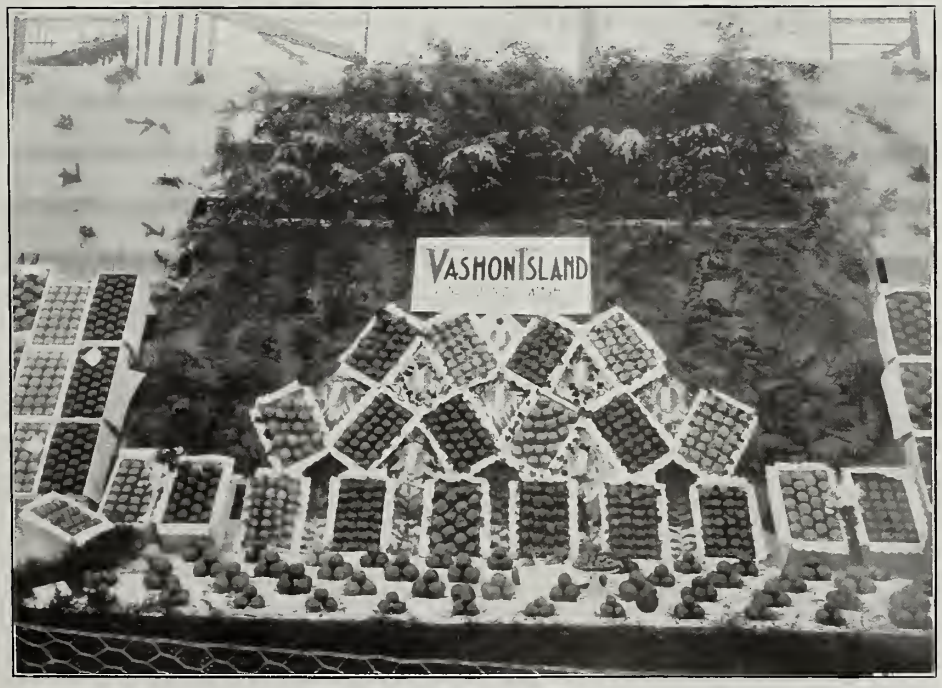
"American shippers should bear in mind that it is not at all difficult for the bidders at these auctions to have a mutual agreement with regard to prices which will be paid for the American product. As a matter of fact, prices usually remain uniform at the auctions, unless there happens to be an empty market, and much need for the fruit that is offered.

"Another very curious condition is that there is very little distribution of apples out of the big receiving centers. Apples received in Hamburg, London, or other large European points, are consumed there with little reference to the great number of consumers which are in the country districts. Very little American fruit gets into the interior. It is rather difficult for us to increase our foreign markets on that account.

"At the present time I do not believe that there is going to be the same market for high class fruits in Europe that there will be in our own country. I am sure that the fruit of the finest quality will continue to be sold to our own more discriminating public. Europe at the present time asks for grade rather than quality. Possibly their markets may be cultivated along different lines, but it will never be done, unless we get some live Americans over there to do it.

"I am not sure but that it would be well for American producers and ship-

Engraved by Hicks-Chatten Co., Portland, Oregon
DISPLAY EXHIBITED BY THE OMAK COMMERCIAL CLUB, OMAK, WASHINGTON AT SPOKANE NATIONAL APPLE SHOW, 1909



Engraved by Hicks-Chatten Co., Portland, Oregon
VASHON ISLAND, WASHINGTON, EXHIBIT AT NATIONAL APPLE SHOW SPOKANE, WASHINGTON, 1909

pers to have in Europe agents whose business it would be to secure the best possible markets for American fruits. There is a vast public waiting to be supplied with good American apples, and one of the great problems is to reach the mass of consumers, which is not done at the present time.

"What variety of apples taste best in the Hamburg markets?" was asked of Professor Craig, after he had closed his remarks relative to European markets.

"It would be foolish for me to advise you to grow apples for the Hamburg markets which they like there and you cannot grow here. Speaking generally, the Hamburg markets desire 'color.' Color is even more important in Glasgow than in Hamburg. Greenings can be sold in Hamburg, but they want color. Greenings do not sell well in Glasgow.

"London has a 'cosmopolitan' market. There, you can sell anything. I do not think that the London buyers express any special likes or dislikes with regard to color. But they do want something that is uniformly graded. Kieffer pears sold well in London last year, and so did Ben Davis apples. I saw Ben Davis apples selling in barrels much more readily than the Oregon Spitzenbergs."

Asked if he had ever seen any American prunes sold in the markets of Europe, Professor Craig replied that he never had, but undersood that a few shipments had been made.

"What is the best package for apples?" was another question, the following discussion of which created a deep interest. Professor Craig replied:

"The commercial demand has been in the past, and is to a large extent at the present time, for barrels. This package does more to injure the marketing possibilities of the apple than anything else. The barrel has been universally condemned.

"I believe, however, that the sentiment is changing in favor of the box. A Boston dealer once told me that there they had no use for boxes, but a year or so later I found that they were beginning to use boxes in Boston, and this man then told me that 'boxes were all right,' he guessed. The settlement of this question will be what you make it. Undoubtedly the box makes for the fine fruit. The right kind of packages used stimulates and keeps the grower up to the standard. The barrel helps to degrade the quality of the fruit."

"Many of our Washington apple growers resent the bill which Representative Porter is supporting in Congress, which will, if passed, result in the changing of the size of our apple boxes," declared an orchardist who had listened to Professor Craig's remarks. "Do you know who is back of that bill?"

"I have heard that matter discussed in a good many places," replied the professor. "I do not know who is back of it. The principle is that uniformity in the package is desired, and that, I think, is reasonable. In the settlement of this question of what is the most desirable package for universal use, undoubtedly the western growers should have a very active voice. You men out here are on the ground floor in the box question, and ought to have something to say about it. Having uniformity in the package will do much to stimulate the trade, but what is the most desirable size of package I am unable to say. The Canadians and the Californians differ in their views in this matter, though I believe that we use a uniform package on the Pacific Coast."

"What we object to is that the people in the East are trying to tell us what kind of packages to use. We have not been invited to express our opinion in this matter," said another man.

"There is no doubt that this was an inconsiderate move on the part of the supporters of the Porter bill, and not diplomatic," replied Professor Craig. "I hope, however, that the affair has not progressed so far but that the contending persons can yet get together and act in harmony."

Engraved by Hicks-Chatten Co., Portland, Oregon

STEVENS COUNTY, WASHINGTON, EXHIBIT AT SPOKANE NATIONAL APPLE SHOW, 1909
With Professor H. E. Van Deman, chief judge, and Professor W. J. Greene, associate judge

Engraved by Hicks-Chatten Co., Portland, Oregon

BAKER VALLEY, BAKER COUNTY, OREGON, DISPLAY AT SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, NOVEMBER, 1909

THE GROWING OF APPLES WITHOUT IRRIGATION

BY C. L. SMITH, R. D. 8, SPOKANE, WASHINGTON

TO GROW apples successfully without irrigation it is necessary to exercise judgment in the selection of soil, location, varieties, quality of stock, preparation of land, planting, cultivation, pruning, thinning and spraying. All of these pertain to the growing of apples. This, however, is only half of the problem. The gathering, packing and marketing is the bigger half. If the first half is well done it makes the second half much easier. Neglect of any one of the factors will modify or entirely wipe out any possible profit.

In this paper my aim is to deal only with the growing of the apples. The statements are not based on any theory or guess work, but on actual experience and observation in the orchard, and a careful study of the methods and practices of others, both the successful and the unsuccessful ones. The best orchard site is a moderately sloping hillside, a northern slope having some slight advantage, with higher ground nearly on one side and lower on the other. A basin or flat should be avoided. The soil should be deep, the deeper the better. It is seldom profitable to plant an apple orchard where there is less than three feet of good soil over the rock, or where there is a hardpan within three feet of the surface. A clay loam is preferred.

As a rule, it would be found unprofitable to try to grow apples on sandy or gravelly soils without irrigation. The ground should be worked deep and fine before planting. If trees can be secured that have ripened their wood early, then late fall planting is better than spring. Spring planting is all right, but the earlier it is done the better. (See A. L.) Get clean, thrifty, but not overgrown one-year-old trees, three to four foot size is better than the larger sizes. Procure them from the nearest reliable grower, or what is better, procure scions from trees that you know have borne the kind of apples you want, and grow your own trees. If trees are ordered from a nursery, insist on careful handling and packing, and when the trees are received immediately heel them in, being careful to work fine soil close to and around the roots. Do this, even if you expect to plant the next day. Never expose the roots to sun or wind, or allow them to get dry. Trim off all bruised or broken roots. Make the holes large enough to spread the roots naturally, set one or two inches deeper than they grew in the nursery and work the fine soil firmly around the roots—not against them; when the roots are all well covered, firm down with the feet, pressing the earth down and toward the tree. Cut back to eighteen inches.

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PLAINS, MONTANA, EXHIBIT AT SECOND NATIONAL APPLE SHOW, SPOKANE, 1909

Keep the ground well cultivated. There is no serious objection to growing any hoed crop in the young orchard, but these should not be planted too close to the tree or allowed to interfere with continuous cultivation.

It will be found much easier and more profitable to train the young tree and shape it as it is growing than to let it grow wild and then try to cut or saw it into proper shape. If more than five branches start on the young tree, pinch them off. If the branches grow unevenly pinch the ends of the stronger shoots to check their growth. For the first four years prune in March to stimulate wood growth and get the tree in proper shape. Usually cut away about one-third to one-half of each season's growth so as to get a low-headed, stocky tree. Go over the young trees three or four times during June and July and pinch the ends of all young shoots that you do not want to grow into permanent branches. Leave these stubs or spurs on the main branches, the more of them you have the better; they will develop fruit spurs just where they are most valuable, close to the body and main branches of the tree. If the young tree is trained in this way until it comes into bearing, very little pruning will be necessary thereafter, and this should be done in June. When trees are headed low, the main branches covered with fruit spurs their entire length, the fruit thinned so as to stimulate annual bearing, the strength of the tree will be expended in the production of fruit rather than surplus wood.

Engraved by Hicks-Chatten Co., Portland, Oregon
KLICKITAT COUNTY, WASHINGTON, EXHIBIT, SPOKANE NATIONAL APPLE SHOW, 1909

SMUDGE POTS CAN SAVE FRUIT CROP FROM FROST

BY H. J. HAGERMAN, EX-GOVERNOR OF NEW MEXICO

THE following letter anent the use of smudge pots in saving the fruit crop from the late freeze was written to the Register-Tribune by Ex-Governor Hagerman, and while it is rather a lengthy article we believe that it treats in a practical way a subject that is of vital interest to the orchardists of this vicinity, and gladly give space for its publication.

The letter follows:

Dear Sir: We are constantly receiving inquiries as to the success of our experiment in orchard heating, or "smudging," in Southsprings orchards this spring.

It is a matter of much importance to the whole valley, and I beg leave to answer all inquiries through your paper. We are very glad to give the public the result of our experience.

Orchard heating by means of coal or oil burning pots has been practiced in Colorado for four or five years, but never with great success until the last two years. In California, smudge pots and smudge fires have been used for a longer period.

It has been satisfactorily demonstrated that, with a hundred and fifty pots to the acre, a temperature of twenty-one degrees Fahrenheit above zero can be raised sufficiently to prevent the destruction of the fruit. This is an extreme case. It is extremely unusual, even in higher altitudes of Colorado, for the temperature to fall to such a point that an artificial rise of from six to eight degrees will not be sufficient to save the crop. The number of pots to the acre necessary to produce a certain amount of heat depends largely upon conditions. When the foliage is far advanced fewer pots are required than when there is but little foliage. With a high, cold wind the difficulty is increased, though from our own experience, I would say that with a slight breeze blowing, effective smudging is more practicable than when there is no breeze at all.

Engraved by Hicks-Chatten Co., Portland, Oregon

GREEN BLUFF, WASHINGTON, EXHIBIT AT SECOND NATIONAL APPLE SHOW SPOKANE, WASHINGTON, NOVEMBER, 1909

Sixty to one hundred pots per acre will raise the temperature four to ten degrees, according to conditions. This is, I think, a fair statement.

From a study of the weather records of the past seven years it is safe to say that if one is prepared from the 15th of March to the 1st of May to raise the temperature in his orchard six degrees Fahrenheit between the hours of 1 a. m. to 7 a. m., he is reasonably sure of saving all his crop from injury by frost.

This can be done by having a maximum of ninety one-gallon pots to the acre ready for lighting during that period. It is very probable that a smaller number of pots would be sufficient, but ninety pots per acre in orchards planted with not less than sixty trees to the acre, one would, in my opinion, be reasonably safe.

It is to be remarked in passing, that frosts during the period of budding and early growth of apples in this section are rare, and that the expense of smudge pot equipment is to be regarded as any other kind of insurance would be regarded—as well worth the investment in view of the great profit their use would, in case of necessity, insure. It should also be remembered, that if there are late frosts here, they are very rarely severe ones, and can almost surely be controlled by smudging, whereas statistics prove that when there have been mild frosts here in March and April, there have been almost invariably severe ones, very difficult to control, at about the same time, in other principal apple growing districts of Colorado and the middle west. For instance, the freeze which it is supposed is the one that did most of the damage to the fruit here this spring occurred on the morning of May 1, between 5:30 a. m. and 6:30 a. m., and the temperature did not fall below twenty-nine and a half or thirty degrees Fahrenheit. At Canon City, Colorado, there was on the 29th of April, a regular January blizzard with a temperature of

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EXHIBIT OF CASHMERE, IN THE WENATCHEE VALLEY, WASHINGTON, AT SECOND NATIONAL APPLE SHOW, SPOKANE, 1909

twenty-one degrees for over five hours, and a twenty-mile gale blowing. On the following night in Canon City the temperature for eight hours was down to twenty-two degrees, and before morning dropped as low as seventeen degrees, still the orchardists in Canon City were able, under such extreme conditions, to save a considerable portion of their crop, by a free and judicious use of smudge fires. Similar conditions prevailed in Grand Junction, Colorado.

It is not too much to say that, with the equipment above mentioned, properly used, Pecos Valley orchardists are sure of a full crop.

There are already being manufactured various styles of orchard heaters, several of which are good. Upon investigating several makes we bought about 3,000 Troutman oil pots, patented by P. H. Troutman of Canon City, Colorado, and manufactured in Milwaukee. Mr. Troutman's business address is 703 Symes Building, Denver, Colorado. These pots are made of sheet iron, and will hold five quarts of crude oil. There is an air chamber beneath the floor and a flue up through the center of the reservoir, thus causing a draft and aiding combustion when the surface of the oil is lighted. The more complete the combustion, the greater the heat for the amount of oil used, and the less the residue after burning out. A cover is provided with each pot, to cover the oil when not in use.

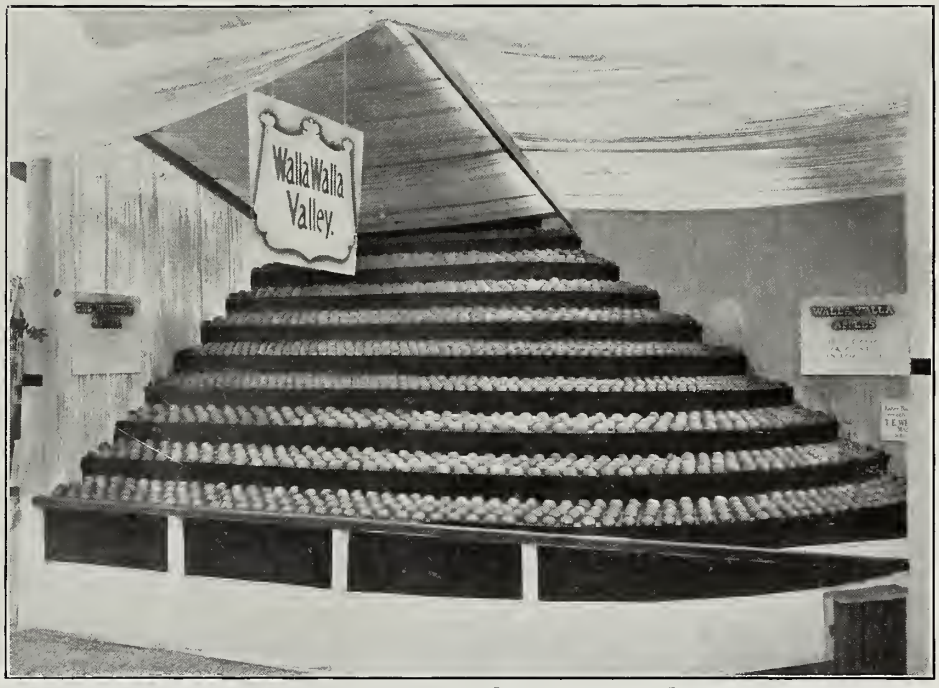
We found the pots very satisfactory. Those pots, including cover, will cost about $20 per hundred.

Mr. Troutman writes that he is perfecting a reservoir heater, one that will have a large capacity and that will burn through the danger period without refilling, thus saving a large amount of labor. While such a pot would be advantageous for orchardists, the cheaper one is doubtless sufficient for most owners of orchards in this district.

The cost of Kansas crude oil in carload lots is at present about four cents per gallon. The rate from Kansas gas belt points is thirty cents per hundred pounds, or about 2.2 cents per gallon, the oil averaging about 7.4 pounds to the gallon. Crude oil can be obtained at the Kansas wells at from fifty to sixty cents per barrel of forty-two gallons. With oil at fifty-five cents per barrel, it would therefore cost, delivered, 3.6 cents per gallon. The railroad rate per 100 pounds for smudge pots is $1.11 from Pueblo, $1.47 from Pittsburg, and $1.80 from Chicago.

To make the initial installation for a ten-acre orchard would cost approximately, as follows:

Ten acres, 90 pots to the acre, 900 pots, at 20 cents.....$180.00
One 3,000-gallon storage tank, mounted 10 feet above ground 100.00
One tank and frame for distributing wagon..... 75.00



Engraved by Hicks-Chatten Co., Portland, Oregon
WALLA WALLA, WASHINGTON, EXHIBIT, IN CHARGE OF L. E. MEACHAM, SECRETARY COMMERCIAL CLUB, AT SPOKANE SECOND NATIONAL APPLE SHOW, 1909

This estimate might be considerably reduced. The equipment will, of course, be good for many years.

The cost of operation, exclusive of labor, would be on the basis of burning three nights, one gallon of oil each night; 2,700 gallons of oil at four cents, $180.00.

A gallon of oil in a Troutman pot will burn six hours under ordinary conditions. The records show that the cold period here almost invariably comes between the hours of 4:30 a. m. and 7 a. m. It is very unlikely that it would ever be necessary in the worst year to burn the pots more than four hours in a night. It follows that with a 2,700-gallon stock all the pots could be burned four nights instead of three. It is, however, very improbable that in any season, however bad elsewhere, it would be necessary to burn the pots here more than three nights.

The cost of labor depends, of course, on the extra amount of hands necessary. Three or four men and boys can light the 900 pots in a half hour. In Grand Junction this season everybody—men, women and children—turned out to help "light up," knowing what the safety of the crop meant to the community. A handful of waste is hung over the edge of each pot. It becomes saturated with the oil and is easily ignited by a torch.

Other makers of orchard heaters which have come to our notice are as follows:

The Bolton Smudge Pot, sold by the Frost Prevention Company, of Fresno,

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DISPLAY OF WENATCHEE CHAMBER OF COMMERCE, WENATCHEE, WASHINGTON AT SECOND NATIONAL APPLE SHOW, SPOKANE, 1909

California, cost about $20 per hundred delivered in Roswell; the Hamilton Reservoir Orchard Heater, sold by the Colorado Orchard Heater Company, Grand Junction, Colorado, costs about $45 per hundred; the Bartow Orchard Heater, W. G. Newton, general agent, Pueblo, Colorado, costs about $20 per hundred; the Plank Pot, sold by the National Orchard Heater Company, Grand Junction, Colorado, costs about $45 per one hundred.

The frosts here this year during April were about as severe as we are likely to get. On April 9 the temperature stood at 24 to 32 degrees between 3 a. m. and 6:30 p. m. On April 10 at from 29 to 32 degrees between 3:30 a. m. and 6:30 a. m. On April 13 at from 30 to 32 degrees between 4.30 a. m. and 6:30 a. m., and on May 1 from 29½ to 32 degrees from 5:30 a. m. to 6:30 a. m.. These frosts were sufficient to do considerable damage to the apples.

A fair estimate seems to show about 33 per cent of a crop in the valley. Where we used the Troutman pots on three of the nights mentioned, we have a full crop of apples.

While the initial cost of installing pots for the full acreage of our orchard would have been considerable, I believe the crop would have been increased in value to the extent of from $50,000 to $70,000.

There is no doubt in the world that smudging pays.

Engraved by Hicks-Chatten Co., Portland, Oregon

DISPLAY OF ARROW LAKE, BRITISH COLUMBIA, AT SECOND NATIONAL APPLE SHOW SPOKANE, WASHINGTON, NOVEMBER, 1909

SPRAYING FOR MOTH

WAS your first spraying for the codling moth done just right? If so, it was almost impossible for you to find a worm hole in the blossom end (the calyx) of your apples at picking time. If calyx worms were common your first spraying, for some reason, was largely a failure. Perhaps the poison was of poor quality, and you may have used it in too small amounts, but it is far more likely that the spraying was not thoroughly and properly done. Perhaps the application was made too early, before the blossoms were mostly off, or too late, after the calyx cups had closed; but it is more likely that you were in too great a hurry, used too little material, and sprayed from the ground, and so failed to fill all the calyx cups.

The one test of good work at the first spraying is frequently to examine the blossom to make sure that all have been filled with the spray.

To fill the calyx cups the spray nozzle must be elevated above the trees for the upper blossoms, which necessitates the use of a long spray rod and an elevated platform upon which to stand, unless the trees are very low.

The Colorado Agricultural College has usually recommended a medium coarse spray, but is now inclined to favor as fine a spray as can be thrown with sufficient force to make it carry well into the outer calyx cup. A coarse spray requires more material and increases the likelihood of accumulating a harmful amount of arsenic in the soil.

The writer does not think that all sprayings, after the calyx cups have tightly closed, are useless; but after another year of experimentation and observation upon this insect, I am more strongly than ever of the opinion that a thorough spraying just after the blossoms have fallen will do more than all subsequent sprayings to prevent wormy apples; and if the first spraying for any reason is a failure, later applications will not prevent a wormy crop of fruit.

C. P. Gillette,
Colorado Agricultural College, Fort Collins.

Engraved by Hicks-Chatten Co., Portland, Oregon

VERNON, BRITISH COLUMBIA, DISPLAY AT SECOND NATIONAL APPLE SHOW SPOKANE, WASHINGTON, NOVEMBER, 1909

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THE PACIFIC MONTHLY
The Magazine of the West
Portland, Oregon, December 1, 1909.

Better Fruit Publishing Company:

I have just come down to the office after a nine weeks' siege of typhoid-pneumonia, and on my desk I find a copy of "Better Fruit" for November, your irrigation edition. As you know, The Pacific Monthly has gotten out several irrigation issues. Orchard and Farm, Irrigation Age and various other publications have gotten out special irrigation issues, but I want to tell you that I have never yet seen anything in this line that will compare with your irrigation edition. Editorially, pictorially and typographically it is a delight.

Your Commercial Club should buy 10,000 or 15,000 copies of this issue to send to easterners and middle westerners who write for information in regard to the West.

I am glad to see that you have liberal patronage from the advertising standpoint. "Better Fruit," like The Pacific Monthly, should have the enthusiastic support of those who are interested in the upbuilding of the West. Yours very truly,

Fred Lockley, Manager.

PRIZE WINNERS AT THE NATIONAL APPLE SHOW

LIST FURNISHED BY AUGUST WOLF

SWEEPSTAKE, careload of 630 boxes or 210 barrels of one or more standard commercial winter varieties, $1,000 and gold medal banner to first; $500 and silver medal banner to second, and solid silver loving cup and diploma to third—Tronson & Guthrie, Eagle Point, Oregon, Spitzenberg, first; W. W. Sawyer, Sunnyside, Washington, Grimes Golden, second; E. C. Hill, North Yakima, Washington, Spitzenberg, third.

The other premiums in the carload class, $250 to firsts and $100 to seconds, were awarded as follows:

Winesap—Ed Perry, North Yakima, first; Joseph Nessels, Wenatchee, second.

Rome Beauty—B. C. Cameron, Farmington, first; J. A. Bourgaise, Toppenish, second.

Wagener—C. E. Atkinson, Green Bluff, Spokane, first; no second.

Spitzenberg—Tronson & Guthrie, Eagle Point, Oregon, first; E. C. Hill, North Yakima, second.

For the best car of any other standard winter variety—W. W. Sawyer, Grimes Golden, Sunnyside, Washington, first; P. B. Packwood, Stayman Winesap, Entiat, Washington, second.

For the best mixed carload of any standard winter variety—J. E. McCurdy, Toppenish, Washington, first; no second.

Yellow Newtown—Charles Pope, Ashland, Oregon, received too late for display, special award of honor.

Rome Beauty—R. P. Wright, Chelan, Washington, received too late for display, special award of honor.

Meadow Lake Special, value $1,250; best ten boxes Rome Beauty—First prize, five acres of choice orchard land in Meadow Lake district, seven miles from Spokane, donated by Hanauer-Graves Company, Spokane, won by R. M. Harrison, Cashmere, Washington; William Tedford, Wenatchee, second, $50; P. F. Peloquin, Malaga, Washington, diploma.

Oregon Valley Land Company Special, value $1,000; best ten boxes Winter Banana—First prize, five acres of land with water right to irrigate same, deed and water right delivered to winner without restriction, land located in the Lakeview district, Oregon, won by M. Horan, Wenatchee; George B. Spencer, Entiat, Washington, second, $50; no third.

Methow Canal Special; best ten boxes Spitzenberg—First prize, $100 in cash, donated by Methow Canal Company, Twisp, Washington, won by Charles W. Reed, Hood River, Oregon; A. D. Browning, Wenatchee, Washington, second, $50; S. P. Ralph, Ashland, Oregon, third, diploma.

Best ten boxes McIntosh Red—First prize, $100 in cash, won by Ben Kress, Hamilton, Montana; Henry Buck, Stevensville, Montana, second, $50; H. W. Collins, Carson, British Columbia, third, diploma.

Silver Grill Purse: Best ten boxes Winesap—First prize, $150 cash, won by E. N. Small, Wenatchee, Washington; O. G. France, Wenatchee, second, $50; Harold P. Glazier, Wenatchee, third, diploma.

Silver Grill Purse: Best ten boxes Wagener—First prize, $150 cash, won by Harry E. Nelson, Chester, Washington; Peter King, Selah, Washington, second, $50; J. H. Clay, Mica, Washington, third, diploma.

Best ten boxes Arkansas Black—First prize, $100 cash from National Apple Show and Samson spray pump with attachments, donated by the Deming Company of Salem, Ohio, won by Ellsworth Ralph, Ashland, Oregon, second, $50; J. P. McNabb & Son, Ashland, third.

Best ten boxes of any other standard commercial winter variety—First prize, $100 cash, won by Ellsworth France, Wenatchee, Washington; C. L. Green, Wenatchee, second, $50; I. W. Stevens, Chelan, Washington, third, diploma.

Engraved by Hicks-Chatten Co., Portland, Oregon

LEWISTON, IDAHO, AND CLARKSTON, WASHINGTON, EXHIBIT AT SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, 1909

France, Wenatchee, Washington; Tedford Brothers, Wenatchee, second, $50; L. A. Taylor, Wenatchee, third, diploma.

Best ten boxes Delicious—First prize, $100 cash from National Apple Show and Myers spray outfit donated by Mitchell, Lewis & Staver Company, won by Richard Hart, Toppenish, Washington; no awards to second or third.

Best ten boxes Yellow Newtown Pippin—First prize, $100 cash from National Apple Show and Hardie twin cylinder hand pump with attachments, donated by Hardie Manufacturing Company, won by E. N. Small, Wenatchee, Washington; S. P.

Added special prizes for all exhibitors in ten-box contest—The Oregon Spray and Gas Company, the Hood River Spray Manufacturing Company and Medford Spray Company have combined in the following donation: To every exhibitor of ten boxes of Spitzenberg, Winesap, Arkansas Black, Rome Beauty, McIntosh Red, Wagener, Yellow Newtown, Winter Banana, Delicious, and one judges' choice, entered, the companies presented a five-gallon can of Niagara lime-sulphur spray.

"Better Fruit" Special: Best ten-box pack—E. H. Shepard, editor and publisher of "Better Fruit," presented a solid silver trophy to Ellsworth France, Wenatchee, for the best packed ten-box display.

The Westlake Trophy, presented by the Westlake Company of Spokane, and $250 by National Apple Show, for limited displays of two boxes, two barrels, two baskets, two jars and two plates of one or more varieties—O. G. France, Wenatchee, first; Harry E. Nelson, Chester, second, $100 and silver medal banner; A. J. Chandler, Spokane, third, solid silver trophy.

Limited contest, display occupying space of ten by twenty feet, any number of varieties and decorations as desired, products of non-irrigated land—Klickitat Development League, Goldendale, Washington, first, $100, gold medal banner and Kimball orchard cultivator donated by S. P. Kimball, Salem, Oregon; Green Bluff Fruit Growers' Association, Mead, Washington, second, $50 and silver medal banner; Stevens County, Kettle Falls, Washington, third, solid silver cup.

Same for irrigated products—The Richey-Gilbert Company, Toppenish, Washington, first, $100, gold medal banner and a Kimball cultivator; Wenatchee Commercial Club, Wenatchee, second, $50 and silver medal banner; Lake Chelan district, Chelan, Washington, third, solid silver cup.

International Apple Shippers' silver trophy for the best packing and grading—O. A. Smith & Son, Garfield, Washington.

Eastern Special, competition limited to Atlantic and New England states, for best exhibits of one barrel or three boxes, any variety—First, $100 in cash, won by Simons, Shuttleworth & France Company, New York; second, $50 prize, W. S. Teator, Upper Red Hook, New Jersey.

Middle West Special, competition limited to Middle West states and Ohio, one barrel or three boxes, any variety—First, $100 in cash, won by Jewell Nursery Company, Lake City, Minnesota; no second.

Southern Special, competition limited to Southern states, one barrel or three boxes, any variety—First, $100 cash, won by John D. Fort, Athens, Georgia; second, $50 cash, Algoma Orchards, Callaway, Virginia.

Western Special, competition limited to states west of Rocky Mountains, three boxes or one

Engraved by Hicks-Chatten Co., Portland, Oregon

EXHIBIT OF HAMILTON CHAMBER OF COMMERCE, BITTER ROOT VALLEY, MONTANA AT SECOND NATIONAL APPLE SHOW, SPOKANE, WASHINGTON, 1909

barrel, any variety—First, $100 in cash, won by Tronson & Guthrie, Eagle Point, Oregon; second, $50 cash, Ellsworth France, Wenatchee.

Foreign Country Special, limited to country or territory outside of the United States—First, $100 cash, won by H. C. Mallan, Kelowna, British Columbia; second, $50 cash, Farmers' Exchange, Salmon Arm, British Columbia.

Best five boxes Black Twig—First prize, $50 cash, won by C. L. Green, Wenatchee; second, $15 cash, H. M. Gilbert, North Yakima; third prize, National Apple Show diploma, E. N. Small, Wenatchee.

Best five boxes Baldwin—First prize, $50 cash, won by Peter King, Selah, Washington; second prize, $15 cash, Klickitat Development League, Goldendale, Washington; third prize, National Apple Show diploma, A. G. Hall, Chelan.

Best five boxes Rhode Island Greening—First prize, $50 cash, won by C. L. Green, Wenatchee; second prize, $15 cash, B. L. Smith, Okanogan, Washington; third prize, National Apple Show diploma, J. D. Jones, Mead, Washington.

Best five boxes Northern Spy—First prize, $50 cash, won by R. Sweeny, Kelowna, British Columbia; second prize, $15 cash, Coldstream Ranch, Vernon, British Columbia; no third.

Best five boxes Stayman Winesap—First prize, $50 cash, won by H. Blackman, Wenatchee; second prize, $15 cash, T. J. Wright, Wenatchee; third prize, National Apple Show diploma, F. L. Post & Sons, Chelan, Washington.

Best five boxes Ben Davis—First prize, $50 cash, won by C. L. Green, Wenatchee; second price, $15 cash, Ellsworth France, Wenatchee; third prize, National Apple Show diploma, A. G. Hall, Chelan.

Best five boxes Grimes Golden—First prize, $50 cash, won by Ellsworth France, Wenatchee; second prize, $15 cash, W. S. Gatton, Mead; third prize, National Apple Show diploma, J. T. Pogue, Omak, Washington.

Best five boxes or two barrels of Jonathan—First prize, $25 cash and solid silver loving cup, donated by the "Fruit Grower" of St. Joseph, Missouri, won by Tedford Brothers, Wenatchee; second prize, $15 cash, Klickitat Development League; third prize, National Apple Show diploma, J. T. Wright, Wenatchee.

Best five boxes King of Tompkins County—First prize, $50 cash, won by W. R. Sanders, Mead, Washington; second prize, $15 cash, C. E. Atkinson, Mead; third prize, National Apple Show diploma, James Spiers, Kaslo, British Columbia.

Best five boxes of any other standard commercial winter variety—First prize, $50 cash, won by John Hakel, Hood River, Oregon; second prize, $15 cash, William Hart, Cedonia, Washington; third prize, National Apple Show diploma, A. G. Hall, Chelan, Washington.

The following awards were made in the single box competitions:

California Nursery Special: Yellow Bellefleur—First, $10 and 100 fruit trees, won by Tedford Brothers, Wenatchee; second, $5 and diploma, Olson Royce Company, Toppenish.

Meneray and Missoula Nursery Special: McIntosh Reds—First, $10 and 250 fruit trees, won by J. J. Campbell, Willow Point, British Columbia; second, $5 and 100 trees, H. Platt & Sons, Coma, Montana.

Prosser Nursery Special: Four-tier Winter Banana—First, $10 and fifty trees, won by A. D. Jones, Mead, Washington; second, $5 and diploma, A. D. Lowe, Vernon, British Columbia.

Four-tier Spitzenberg—First, $10 and fifty trees, Charles W. Reed, Hood River, Oregon; second, $5 and diploma, John Hackle, Hood River.

Four-tier Arkansas Blacks—First, $10 and fifty trees, won by Tedford Brothers, Wenatchee; second, $5 and diploma, C. S. Green, Wenatchee.

Winesap—First, $10 and 100 trees, won by Tedford Brothers, Wenatchee; second, $5 and diploma, Ellsworth France, Wenatchee.

Spitzenberg—First, $10 and 100 trees, won by L. R. Bailey, Wenatchee; second, $5 and diploma, J. H. Watson & Son, Chelan, Washington.

Newtown Pippin—First, $10 and 100 trees, won by J. H. Watson & Son, Chelan; second, $5 and diploma, E. N. Small, Wenatchee.

Jonathan—First, $10 and 100 trees, won by Tedford Brothers, Wenatchee; second, $5 and diploma, H. N. Swartwood, Wenatchee.

Rome Beauty—First, $10 and 100 trees, won by Ray Redhead, Wenatchee; second, $5 and diploma, William Tedford, Wenatchee.

Wagener—First, $10 and 100 trees, won by Peter King, Selah, Washington; second, $5 and diploma, H. W. Collins, Carson, British Columbia.

Stayman Winesap—First, $10 and 100 trees, won by Ellsworth France, Wenatchee; second, $5 and diploma, R. W. Graybill, Spokane.

German Nursery Special: Grimes Golden—First, $10 and 200 trees, won by Ellsworth France, Wenatchee; second, $5 and diploma, Tedford Brothers, Wenatchee.

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KITTITAS COUNTY, WASHINGTON, DISPLAY AT SECOND NATIONAL APPLE SHOW SPOKANE, WASHINGTON, NOVEMBER, 1909

Carlton Nursery Special: Golden Russet—First, $10 and fifty trees, won by R. E. Harris, Kelowna, British Columbia; second, $5 and diploma, William Cockle, Kaslo, British Columbia.

Fresno Nursery Special: Black Twig—First, $10 and 100 trees, won by W. F. Butler, Wenatchee; second, $5 and diploma, C. L. Green, Wenatchee.

Pilkington Nursery Special: Northern Spy—First, $10 and 200 trees, won by B. L. Fortman, Salem, Oregon; second, $5 and diploma, C. Goldman Ranch, Vernon, British Columbia.

Adler's Spray Prize: Ben Davis—First, $10 and spray powder, won by C. L. Green, Wenatchee; second, $5 and diploma, Ellsworth France, Wenatchee.

Vineland Nursery Special: Delicious—First, $10 and 500 trees, won by L. R. Bailey, Wenatchee; second, $5 and diploma, William Culver, Chelan.

Orchardists' Supply Company Special: Baldwin—First, $10 and 500 trees, won by A. D. Browning, Wenatchee; second, Charles W. Reed, Hood River, Oregon.

Washtucna Valley Pack Special: Four-tier pack—First, 250 trees, won by P. B. Packwood, Entiat, Washington; second, 250 trees, H. E. Nelson, Chester, Washington.

Yakima Valley Nursery Special: Five boxes three and one-half tier pack—Prize, 500 assorted trees, won by A. A. Blackman, Wenatchee.

Yakima Rex Spray Special: Five boxes four-tier pack—C. L. Green, Wenatchee; prize, five barrels Rex spray.

Charles H. Lilly Special: Five boxes four-tier pack—H. E. Nelson, Chester, Washington; prize, 500 trees.

Washington Nursery Special: Five boxes five-tier pack—Raymond Redhead, Wenatchee; prize, 500 trees.

Pyramid of fifty largest apples—First prize, $100 cash, won by L. H. Spader, Chelan; second, $25, Lorr & Ball, Methow, Washington; third, diploma, H. W. Collins, Carson, British Columbia.

Biggest apple—First, Lorr & Ball, Methow; second, Ellsworth France, Wenatchee.

Seedling—First, Columbia & Okanogan Nursery Company, Wenatchee; second, R. H. Finley, Kettle Falls, Washington.

Best keepers—First, I. H. Forney, Moscow, Idaho; second, F. W. Arlond, Wenatchee.

The following awards, aggregating $2,000 in cash and $1,000 worth of trees, were made in the plate contents, $3 to first and $1 to seconds, for displays of five apples:

Arkansas Black—First, Ellsworth France, Wenatchee; second, D. W. Rodderick, Wenatchee.

Alexander—First, L. W. Smith, Wenatchee; second, Fleming Brothers, Vernon, British Columbia.

Apple of Commerce—First, Mrs. M. O. Tibbits, Wenatchee; second, Wenatchee Orchards Bonds Company, Cashmere, Washington.

Engraved by Hicks-Chatten Co., Portland, Oregon

DISPLAY OF BIG ROCK DISTRICT, WASHINGTON, AT SECOND NATIONAL APPLE SHOW SPOKANE, WASHINGTON, NOVEMBER 15 TO 20, 1909

Aikin Red—First, Alexander Murray, Wenatchee; second, O. G. France, Wenatchee.
American Blush—First, R. P. Wright, Lakeside.
American Beauty—O. G. France, Wenatchee.
Antonovka—W. B. Harlan, Como, Montana.
Ben Davis—First, Ellsworth France, Wenatchee; second, T. J. Wright, Wenatchee.
Black Ben Davis—First, W. R. Meyers, Wenatchee; second, T. J. Black, Wenatchee.
Blue Pearmain—First, O. A. Hoag, Chelan; second, O. G. France, Wenatchee.
Baldwin—First, Ellsworth France, Wenatchee; second, G. H. Baillie, Kelowna, British Columbia.
Baxter—First, H. W. Collins, Carson, British Columbia; second, J. T. Bealby, Nelson, British Columbia.
Black Twig—First, George H. Farwell, Wenatchee; second, William Tedford, Wenatchee.
Belmont Waxen—C. L. Green, Wenatchee.
Babbitt—First, O. A. Hoag, Chelan, Washington; second, W. B. Harlan, Como, Montana.
Benoni—Joseph A. Burton, Mitchell, Indiana.
Bismarck—First, H. S. Simmons, Wenatchee; second, I. William Cockle, Kaslo, British Columbia.
Beitigheimer—R. P. Wright, Lakeside, Washington.
Benheim Orange—First, James Johnson, Nelson, British Columbia; second, R. Shiell, Needles, British Columbia.
Belle de Boskoope—First, H. S. Simmons, Wenatchee; second, C. W. West, Nelson, British Columbia.
Ben Hur—First, O. G. France, Wenatchee; second, C. L. Green, Wenatchee.
Cross—W. B. Harlan, Como, Montana.
Blush Colville—W. B. Harlan, Como, Montana.
Boiken—W. B. Harlan, Como, Montana.
Big Apple—First, Lorr & Ball, Methow, Washington; second, Ellsworth France, Wenatchee.
Canada Red—First, B. X. Ranch, Vernon, British Columbia; second, Stradfield Ranch, Vernon, British Columbia.
Canada Reinette—C. L. Green, Wenatchee.
Cox Orange Pippin—First, Gordon Hallett, Hanops, British Columbia; second, I. W. Cockle, Kaslo, British Columbia.
Chicago—First, R. P. Wright, Lakeside, Washington; second, Ida Fobes, Cedonia, Washington.
Champion—First, George Hingston & Son, Mead, Washington; second, L. R. Bailey, Wenatchee.
Clayton—C. T. Johnson, Spokane, Washington.
Chenango—J. S. Shepard, Chelan, Washington.
Duchess—First, C. E. Atkinson, Mead; second, George H. Farwell, Wenatchee.
Delicious—First, Wenatchee Orchards Bonds Company, Cashmere, Washington; second, Dick Hart, Toppenish, Washington.
Domine—R. P. Wright, Lakeside, Washington.
Fallawater—First, Thomas J. Jones, Bonners Ferry, Idaho; second, George Hingston & Son, Mead, Washington.
Fall Pippin—First, R. B. Newell, Freeman, Washington; second, E. E. McGinnis, Mead.
Gano—First, T. J. Wright, Wenatchee; second, Kennyon Ranch, Vernon, British Columbia.
Gravenstein—First, I. W. Cockle, Kaslo, British Columbia; second, F. G. Farquier, Needles, British Columbia.
Grimes Golden—First, Ellsworth France, Wenatchee; second L. W. Smith, Wenatchee.
Golden Russet—First, R. E. Harris, Kalowna, British Columbia; second, Coldstream Ranch, Vernon, British Columbia.
Gideon—First, A. D. Emory, Nelson, British Columbia; second, Joseph A. Burton, Mitchell, Indiana.
Genetin—L. H. Spader, Chelan, Washington.
Gloria Mundi—First, D. M. Parkhurst, Mica, Washington; second, J. R. Hill, Peach, Washington.
Hubbardston—First, R. H. Finley, Kettle Falls, Washington; second, O. A. Hoag, Chelan.
Hoover—First, J. Basinski, Wenatchee; second, C. L. Green, Wenatchee.

Engraved by Hicks-Chatten Co., Portland, Oregon
FARMINGTON, WASHINGTON, DISPLAY AT SPOKANE NATIONAL APPLE SHOW, 1909

Hydes King—First, L. W. Smith, Wenatchee; second, C. L. Green, Wenatchee.
Hyslop Crab—First, George H. Farwell, Wenatchee; second, C. E. Atkinson, Mead.
Isham Sweet—W. B. Harlan, Como, Montana.
Jonathan—First, O. G. France, Wenatchee; second, Ellsworth France, Wenatchee.
Jefferies—First, George H. Farwell, Wenatchee; second, R. P. Wright, Lakeside.
Lady—First, O. G. France, Wenatchee; second, George H. Farwell, Wenatchee.
Longfield, R. E. Harris, Kelowna.
Lawver—First, C. E. Atkinson, Mead; second, J. L. Pogue, Omak, Washington.
Lowell—First, L. W. Smith, Wenatchee; second, C. L. Green, Wenatchee.
Missing Link—First, L. B. Gilbert, Toppenish; second, M. Horan, Wenatchee.
Maiden Blush—First, Thomas J. Jones, Bonners Ferry, Idaho; second, C. E. Atkinson, Mead.
McIntosh Red—First, O. G. France, Wenatchee; second, Samuel Miller, Mead.
Missouri Pippin—First, William Tedford, Wenatchee; second, John Scott, Wenatchee.
McMahon White—First, J. I. Pogue, Omak; second, James Johnston, Nelson, British Columbia.

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METHOW VALLEY, WASHINGTON, EXHIBIT AT SPOKANE NATIONAL APPLE SHOW, 1909

Martha Crab—C. L. Green, Wenatchee.
Mann—First, T. J. Black, Wenatchee; second, J. T. Bealby, Nelson, British Columbia.
McAffee—First, C. L. Green, Wenatchee; second, Lorr & Ball, Methow.
Northern Spy—First, P. P. Holcomb, Wenatchee; second, R. P. Wright, Lakeside.
Northwest Greening—First, Charles Carpenter, Okanogan, Washington; second, J. Stanger, Mead.
New York Wins—J. L. Webster, Vernon, British Columbia.
Newtown Spitz—J. S. Shepard, Chelan; second, G. H. Webb, Cedonia, Washington.
Ortley—First, O. G. France, Wenatchee; second, L. W. Smith, Okanogan.
Oregon Red Winter—First, Ellsworth France, Wenatchee; second, O. G. France, Wenatchee.
Ontario—First, C. E. Weeks, Kelowna, British Columbia; second, J. J. Campbell, Willow Point, British Columbia.
Pewaukee—First, F. L. Post & Son, Chelan; second, Charles Rink, Mead.
Paradise Winter Sweet—Ellsworth France, Wenatchee.
Rome Beauty—First, G. W. Drinkwine, Wenatchee; second, Ellsworth France, Wenatchee.
Rhode Island Greening—First, R. P. Wright, Lakeside; second, C. L. Green, Wenatchee.
Ribston Pippin—J. T. Bealby, Nelson, British Columbia.
Roxbury Russet—First, O. G. France, Wenatchee; second, A. Leet, Kaslo, British Columbia.
Red Cheek Pippin or Mammoth—First, Flemming Brothers, Vernon, British Columbia; second, C. L. Green, Wenatchee.
Romanite—O. A. Hoag, Chelan.
Big Romanite or Penock—Ida Fobes, Cedonia.
Red Winter Pearmain—George H. Farwell, Wenatchee.
Red Bellflower—George H. Farwell, Wenatchee.
Roman Stem—First, E. N. Small, Wenatchee; second, R. P. Wright, Lakeside.
Rambo—First, R. P. Wright, Lakeside; second, R. E. Harris, Kelowna, British Columbia.
Stayman Winesap—First, L. A. Taylor, Wenatchee; second, E. Blackman, Wenatchee.
Senator—First, O. G. France, Wenatchee; second, T. J. Black, Wenatchee.
Spokane Beauty—First, Thomas J. Jones, Bonners Ferry, Idaho; second, L. H. Spader, Chelan.
Spitzenberg—First, C. I. Curtis, Wenatchee; second, C. L. Green, Wenatchee.
St. Lawrence—First, H. Hill, Kelowna; second, George Thompson, Kelowna, British Columbia.
Salome—First, P. P. Holcomb, Wenatchee; second, E. N. Small, Wenatchee.
Stark—First, Lorr & Ball, Methow; second, O. G. France, Wenatchee.
Snow—First, E. E. McGinnis, Mead; second, R. Sweeny, Kelowna, British Columbia.

Continued on page 54

OUR UNPARALLELED CLUBBING OFFERS

"Better Fruit" offers to readers what it considers the finest list of clubbing offers ever placed before the public in the Northwest. Its variety is one that must appeal to readers of all classes. Look it over carefully, select the one you want and send us the proper amount and we will do the rest.

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Woman's Home Companion	1.50
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Better Fruit	1.00
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Woman's Home Companion	$1.50
McClure's	1.50
Better Fruit	1.00
Total	$4.00
All for	3.00

Success	$1.00
American Magazine	1.50
Better Fruit	1.00
Total	$3.50
All for	2.50

Delineator	$1.00
Success	1.00
Everybody's	1.50
Better Fruit	1.00
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All for	3.75

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Success	1.00
American	1.00
Cosmopolitan	1.00
Better Fruit	1.00
Total	$5.00
All for	3.70

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Everybody's	1.50
World's Work	3.00
Better Fruit	1.00
Total	$9.50
All for	7.50

Country Life in America	$4.00
World's Work	3.00
Everybody's	1.50
Delineator	1.00
Better Fruit	1.00
Total	$9.50
All for	7.00

Review of Reviews	$3.00
McClure's	1.50
Scribner's	3.00
Better Fruit	1.00
Total	$8.50
All for	6.25

Review of Reviews	$3.00
Scribner's	3.00
Good Housekeeping	1.25
Better Fruit	1.00
Total	$8.25
All for	6.50

Everybody's	$1.50
American Magazine	1.50
Delineator	1.00
Better Fruit	1.00
Total	$5.00
All for	3.75

Housekeeper	$ .75
Review of Reviews	3.00
McClure's	1 50
Better Fruit	1 00
Total	$6 25
All for	4 00

Country Life in America	$4.00
Review of Reviews	3.00
McClure's	1.50
Better Fruit	1.00
Total	$9.50
All for	6.55

Country Life in America	$4.00
Outing	3.00
Better Fruit	1.00
Total	$8.00
All for	5.50

Pacific Monthly	$1.50
Better Fruit	1.00
Total	$2.50
Both for	2.00

Weekly Oregonian	$1.50
Better Fruit	1.00
Total	$2.50
Both for	1.75

Woman's Home Companion	$1.50
Better Fruit	1.00
Total	$2.50
Both for	1.90

Sunset	$1.50
Better Fruit	1.00
Total	$2.50
Both for	2.00

Sunset	$1.50
Pacific Monthly	1.50
Better Fruit	1.00
Total	$4.00
All for	2.75

Everybody's	$1.50
St. Nicholas (new)	2.50
Delineator	1.00
Better Fruit	1.00
Total	$6.00
All for	4.55

Pacific Monthly	$1.50
Weekly Journal	1.00
Better Fruit	1.00
Total	$3.50
All for	1.50

Breeder's Gazette	$2.00
Better Fruit	1.00
Total	$3.00
Both for	2.00

Northwest Poultry Journal	$ .50
Better Fruit	1.00
Total	$1.50
Both for	1.00

World's Work	$3.00
Everybody's	1.50
Delineator	1.00
Better Fruit	1.00
Total	$6.50
All for	5.75

World's Work	$3.00
Everybody's	1.50
Better Fruit	1.00
Total	$5.50
All for	4.75

World's Work	$3.00
Delineator	1.00
Better Fruit	1.00
Total	$5.00
All for	4.25

Garden Magazine	$1.00
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Book-keeper	2.00	"	1.65
Bookman	3.50	"	3.10
Boston Cooking School	2.00	"	1.65
Breeder's Gazette	3.00	"	2.00
Burr McIntosh Monthly	4.00	"	3.00
Century Magazine	5.00	"	4.80
Children's Magazine	2.00	"	1.65
Christian Herald (New York)	2.50	"	2.10
Country Life in America	5.00	"	4.00
Craftsman	4.00	"	3.35
Current Literature	4.00	"	3.25
Designer	1.50	"	1.35
Dressmaking at Home	2.00	"	1.65
Educational Review	4.00	"	3.50
Electrical World	4.00	"	3.65
Electrician and Mechanic	2.00	"	1.65
Etude (for music lovers)	2.50	"	2.00
Farm Journal (two years)	1.35	"	1.25
Field and Stream	2.50	"	2.00
Forum	3.00	"	2.35
Garden Magazine	2.00	"	1.65
Good Housekeeping	2.00	"	1.65
Good Literature	1.35	"	1.25
Hampton's Magazine	2.50	"	2.00
Harper's Bazar	2.00	"	1.65
Harper's Magazine	5.00	"	4.50
Harper's Weekly	5.00	"	4.50
Home Needlework	1.75	"	1.50
House Beautiful	3.50	"	3.25
Housekeeper	1.75	"	1.60
Housewife	1.35	"	1.25
Human Life	2.00	"	1.65

AND	*Value*		*Cost*
Illustrated London News	$7.00	for	$6.45
Independent	3.00	"	2.35
International Studio	6.00	"	5.25
Judge	6.00	"	5.25
Keramic Studio	5.00	"	4.50
Ladies' World	1.50	"	1.35
Leslie's Weekly	6.00	"	5.00
Life	6.00	"	5.35
Lippincott's Magazine	3.50	"	2.75
Little Folks (Salem) new	2.00	"	1.65
McCall's Magazine and Pattern	1.50	"	1.40
McClure's Magazine	2.50	"	1.90
Metropolitan Magazine	2.50	"	1.65
Modern Priscilla	1.50	"	1.35
Mother's Magazine	1.50	"	1.35
Motor Age	4.00	"	3.25
Motor Boat	3.00	"	2.60
Musician	2.50	"	2.00
Nation	4.00	"	3.75
National Home Journal	1.50	"	1.25
National Magazine	2.50	"	2.00
National Sportsman	2.00	"	1.65
New Idea (New York) fashions	1.50	"	1.35
Normal Instructor	1.75	"	1.50
North American Review	5.00	"	4.50
Outdoor Life	2.50	"	2.25
Outing Magazine	4.00	"	2.35
Outlook	4.00	"	3.75
Pacific Monthly	2.50	"	2.00
Paris Modes and Pattern	1.50	"	1.35
Pearson's Magazine	2.50	"	2.00
People's Home Journal	1.35	"	1.25
Philistine	2.00	"	1.65
Physical Culture	2.00	"	1.65
Pictorial Review and Pattern	2.00	"	1.65
Popular Magazine	2.50	"	2.20
Popular Science Monthly	4.00	"	3.80
Primary Education	2.25	"	2.00
Primary Plans	2.00	"	1.65
Puck	6.00	"	5.10
Putnams-Reader	4.00	"	2.35
Recreation	4.00	"	2.35
Red Book	2.50	"	2.25

AND	*Value*		*Cost*
Reliable Poultry Journal	$1.50	for	$1.35
Review of Reviews	4.00	"	3.00
Rudder	4.00	"	2.35
Scientific American	4.00	"	3.60
Scientific American & Supplem't	8.00	"	6.80
Scribner's Magazine	4.00	"	3.65
Smart Set	3.50	"	2.35
Smith's Magazine	2.50	"	2.20
St. Nicholas	4.00	"	3.80
Strand Magazine	2.50	"	2.40
Suburban Life	4.00	"	2.35
Sunday School Times	2.00	"	1.80
Sunset Magazine	2.50	"	1.65
System	3.00	"	2.80
Table Talk	2.00	"	1.65
Taylor-Trotwood Magazine	2.50	"	2.00
Technical World Magazine	2.50	"	2.00
Theatre Magazine	4.00	"	3.35
Toilettes	3.00	"	2.35
Travel Magazine	2.50	"	2.00
Van Norden Magazine	2.50	"	1.75
Vogue	5.00	"	4.50
Wide World Magazine	2.20	"	2.15
Woman's Home Companion	2.25	"	1.90
Woman's National Daily	2.00	"	1.60
World To-Day	2.50	"	2.00
World's Work	4.00	"	3.25

You May Add to Your List

All Story Magazine	For	$1.00
Argosy	"	1.00
Collier's Weekly	"	5.20
Delineator	"	1.00
Everybody's Magazine	"	1.50
Ladies' Home Journal	"	1.50
Literary Digest	"	3.00
Munsey's Magazine	"	1.00
Popular Mechanics	"	1.00
Saturday Evening Post	"	1.50
Scrap Book	"	1.00
Youth's Companion	"	1.75

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BETTER FRUIT, Hood River, Oregon

BETTER FRUIT

HOOD RIVER, OREGON

Official Organ of
The Northwest Fruit Growers' Association
A Monthly Illustrated Magazine
Published in the Interest of Modern
Fruit Growing and Marketing

All Communications Should Be Addressed and
Remittances Made Payable to

Better Fruit Publishing Company

E. H. SHEPARD — Editor and Publisher
C. R. GREISEN — Assistant Editor
H. E. VAN DEMAN — Contributing Editor

SUBSCRIPTION PRICE $1.00 PER YEAR
In Advance in United States and Canada

Foreign Subscriptions, *Including Postage*, $1.50
Advertising Rates on Application

Entered as second-class matter December 27, 1906, at the Post Office at Hood River, Oregon, under Act of Congress of March 3, 1879

THE NATIONAL APPLE SHOW AT SPOKANE

THE second annual show was a great success, larger and better in every way than last year. Words cannot do the subject justice. We feel a description on our part, in addition to the article from the able pen of August Wolf, which appears elsewhere in this issue, would add but little. The magnificent illustrations tell the story better than any words we could use. So, instead of description, we will take the liberty of saying a few words about the benefit of the show to the apple industry.

The objects of the National Apple Show at Spokane are beyond the casual observer, and not only great, but numerous. Articles in some of the papers are advocating holding the show in Chicago or some eastern city. That may be all right. We don't object to making a display elsewhere. But where the National Apple show is to be held next year depends on what object the show is to be held for. If the show is to be held for the entertainment of any eastern city or the purpose of selling fruit lands, or creating a sale for our apples, the matter is entitled to consideration.

No man who attended the show last year and this year who was observant, could fail to draw one great conclusion of primary and paramount importance; that is, the educational value of the show in grading and packing. The improvement along these lines this year as compared to last year is of inestimable value to the apple industry—means a better price and many more thousands of dollars in net returns. The National Apple Show, by being held in our midst, brings the growers in closer harmony and touch. It affords an opportunity for growers from everywhere in the Northwest to get together, learn and profit by the experience of others. It means acting in harmony. It means united action.

The meeting at the National Apple Show, at Spokane, for discussion of the Lafean bill, was suggested by the editor of "Better Fruit" to the show management, and resulted in the Northwest being united in opposition to the size of the box as mentioned in the Lafean bill, and getting on a combined working basis to oppose it.

This same meeting resulted in uniform grades and terms being adopted by the representatives from the entire Northwest for all future apple packs. Either the united action of the growers in opposition to the Lafean apple box or the adoption of uniform grades and terms for apple packs are worth more to the Northwest than the entire cost of the show, which was over $42,000, and Spokane assumed and guaranteed the entire expense.

There is just as much to be learned in the future, and even more, than we have learned in the past. A national apple show at home will afford the opportunity, but one somewhere else will not. A national apple show at home is almost a necessity from an educational point of view. We can all go to Spokane, but we all cannot and will not go to Chicago. We must hold this apple show where the greatest good for the greatest number can be secured. We must avail ourselves of every opportunity to improve and do better work. Proper methods, better fruit and better packing are the primary principles that we must continue to improve. In no eastern city can so many of us get together for educational work along these lines. When it becomes necessary to hold a show in an eastern city to increase the demand for northwestern apples let it be another show, but not one in place of the National Apple Show at Spokane.

Engraved by Hicks-Chatten Co., Portland, Oregon

C. R. Greisen, of "Better Fruit," holding the two largest apples at the National Apple Show at Spokane, 1909. One grown by N. W. Bone, Hood River, Oregon; the other by F. L. Post & Son, Chelan, Washington.

Engraved by Hicks-Chatten Co., Portland, Oregon

"BETTER FRUIT" DISPLAY AT NATIONAL APPLE SHOW, SPOKANE, 1909
The best fruit growers' paper published in the wide, wide world

◈ ◈ ◈

THROUGH the courtesy of the Northern Pacific Railway we are enabled to reproduce the magnificent picture of the famous Jonathan apple, as grown in the Northwest. The Northern Pacific had the original painting of the Jonathan apple made, from which these cuts were reproduced, all of which is best evidence to show how keen the interest of the Northern Pacific is in the fruit industry. They realize that the Northwest is especially adapted to fruit growing and also realize that by proper encouragement an immense volume of business can be created, which means the development of the country and an increased volume of business for the railroads.

◈ ◈ ◈

A GOOD WORD FOR OUR CONTEMPORARIES

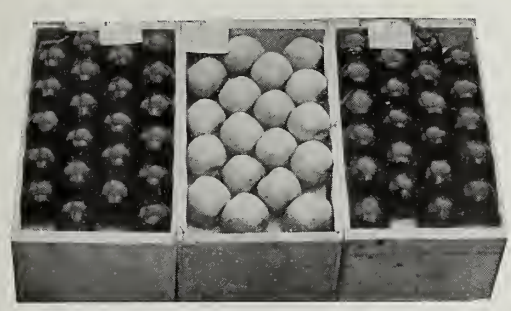
THE Northwest is rapidly growing, business is increasing and our population becoming greater. There is room for many millions of people to make their homes with us. In assisting in this line of work the press plays a part

Newtowns Yield $1800 per Acre

James Lacey on an acre of Newtowns marketed 791 boxes of first grade apples, which brought $1,698.55. He has left fifty boxes of seconds, which will sell for about $1.50 per box, and bring the total gross sales from one acre of Newtowns up to $1,800. The returns from his three and a half acres of bearing apples, all kinds, are $3,801.76 for first grade apples alone, and second grades will fully pay for the labor of taking care of the crop. This makes an average of over $1,000 an acre profit.

Live facts in a lively way. Live facts for men and women
Facts that affect you—your family

HOOD RIVER VALLEY
APPLE LANDS



Fancy Hood River Apple Pack

Hood River Orchard in Bloom, Giving Promise of Golden Returns

AGENTS FOR MOUNT HOOD RAILROAD COMPANY
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Many started in a small way; today they are independent
You can begin today. It pays to see us

He who investigates for himself becomes "the man who knows"

W. J. BAKER & CO.

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SEND TODAY FOR LARGE LIST OF ORCHARD LAND, IMPROVED AND UNIMPROVED, AND HANDSOME ILLUSTRATED BOOKLET

that cannot be fully estimated, and, as a matter of fact, it is underestimated most of the time. While each publication should do its own part separately, we should all work together for the development of the great Northwest in general, the fruit industry in particular, and our common good. We can help each other very materially and accomplish much more for everybody, and ourselves at the same time, by assisting each other, than we can separately or by fighting each other. The day has come and the time is ripe; the future and our duty stand clear, and we take pleasure in announcing that "Better Fruit" stands ready to help any good publication in any reasonable way, and to accept help. Every publication has its particular mission in its own field, and each can do much good. Some will succeed, some for various reasons, foreseen and unforeseen, will fail. Of the latter we hope there will be but few.

"Better Fruit" will endeavor to so shape its policy and future as to merit the good will of all, and bears no malice, envy or jealousy towards any publication.

We have created "Better Fruit" along entirely original ideas, copying no one

The School of Size is Good
" " " Quality " Better
" " Having Both " Best

Investigation will prove we have both

"Business Training in Business Methods by Business Experts"

Behnke-Walker

The Leading Business College

Portland, Oregon

MOSIER

MOSIER is six miles from Hood River and has the same climate and soil.
MOSIER and Hood River apples bring the highest prices.
MOSIER district has natural air and water drainage.
MOSIER has splendid transportation facilities.
MOSIER Fruit Growers' Association markets the crops.
MOSIER Valley Bank is owned by the MOSIER people.
MOSIER Telephone Company is owned by the people and connects valley and town.
MOSIER is a rapidly growing district, but good land is still cheap.

The above FACTS, coupled with the scenic beauty and the ideal climate of this locality, make MOSIER well worth thorough investigation.

I have large and small tracts of improved and unimproved land in this vicinity ranging in value from $40 to $100 an acre for unimproved and from $250 to $500 an acre for improved. Give me some idea as to what you are looking for and I will mail you description and prices. Ask for booklet.

D. D. HALL, REAL ESTATE, MOSIER, OREGON

in our methods, and have built up a splendid patronage and clientele, and we sincerely hope our efforts merit the position of influence we have obtained.

We believe that the Northwest, that is, Washington, Oregon, Idaho, Utah, Montana and Colorado, wanted a splendid, and at the same time, handsome, fruit paper. One that was as elegant as our fruit. One that would be true to label, "Extra Fancy." Our results have proved two things. First, that we were correct. Second, that we were too previous, for it has taken a much longer time, more hard work and a great deal more money than we expected. "Better Fruit" is every fruit growers paper in the Northwest. It is published for the benefit of every and all fruit districts. Our circulation is national, for "Better Fruit" has a large eastern subscription list, with subscribers in every state and territory in the Union, and is spreading the fruit gospel of truth all over the land for the up-building of the Northwest.

Our success convinces us that the fruit growers of the Northwest want one splendid fruit growers' paper that is general and devoted to the interest of the entire Northwest, and are willing to support such a paper, because its influence will be greater than any fruit growers' paper that is in any sense local, and because from such a paper they can get all the good ideas, new methods and practical experiences of fruit growers from all the different sections, of which we are all in need. "Better Fruit" set out to meet these requirements and it is universally conceded and admitted that we fill the bill. Some districts, in addition, feel that a local paper is a benefit to a district because it will go more into detail concerning the wants and requirements of a particular section. Some growers are diversified farmers and therefore want a general farming paper in addition to a paper like "Better

J. M. Schmeltzer, Secretary
Hood River Abstract Company
Hood River, Oregon
ABSTRACTS INSURANCE
CONVEYANCING

Chas. G. Pratt, *President*
J. H. Osborne, *Vice-Pres.*
R. W. Pratt, *Cashier*
M. M. Hill
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Hood River Banking & Trust Company
Hood River, Oregon
We own and occupy the finest equipped and most modern bank in Hood River County. A general banking and trust business transacted. Safe deposit boxes. Interest paid on time and savings deposits. Make our bank your headquarters when in Hood River. Correspondence and your patronage solicited

W. C. HOPSON
Milton, Oregon
SPECIAL OFFER
2000 Bartletts
Budded 1908, 5 to 7 feet high
A fine general stock
Apple, Cherry, Peach and Pear Trees
And general assortment nursery stock. Extra care taken to select scions and buds from best bearing stock.
PRICE LIST AND QUOTATIONS ON REQUEST

CAPITAL STOCK, $100,000 SURPLUS, $20,000
FIRST NATIONAL BANK
HOOD RIVER, OREGON
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ESPECIAL ATTENTION AND CARE GIVEN TO BUSINESS DEALS FOR NON-RESIDENT CUSTOMERS
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LADD & TILTON BANK
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Capital fully paid $1,000,000
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Accounts of banks, firms, corporations and individuals solicited. Travelers' checks for sale, and drafts issued available in all countries of Europe.

LESLIE BUTLER, President
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Established 1900
Incorporated 1905
Butler Banking Company
HOOD RIVER, OREGON
Capital Fully Paid, $50,000 Surplus and Profits are $30,000
INTEREST PAID ON TIME DEPOSITS
We Give Special Attention to Good Farm Loans
If you have money to loan we will find you good real estate security, or if you want to borrow we can place your application in good hands, and we make no charge for this service.
THE OLDEST BANK IN HOOD RIVER VALLEY

Fruit," devoted exclusively to fruit growing. Of such papers there are at present a goodly number, some local, some general, each doing its share and nearly all entitled to support.

We know that fruit growers are prosperous. We know that they want a good, general fruit paper, devoted exclusively to fruit growing, and we admit that some, in addition, may also want a local horticultural paper, or a paper devoted to general farming. We know that fruit growers in every section are prosperous. We know they ought to subscribe to "Better Fruit," and if the fruit growers of any particular district believe they ought to have a local paper it is their duty to support that also. We, therefore, take pleasure in mentioning below a list of the papers published in the Northwest that are devoted more or less to fruit growing, general farming and publicity work, hoping that by doing so we may benefit them in various ways, and we particularly hope that by our doing so we may secure for them some subscribers all over the country, as our circulation is not confined to the Northwest alone but has now become extensive throughout the East, reaching every state and territory in the United States:

Opportunity, Spokane, Washington; The Washington Fruit Grower, North Yakima, Washington; Orchard and Farm, Spokane; Western Farmer, Spokane; Horticulturist, Tacoma, Washington; Northwest Farm and Home, North Yakima, Washington; Gem State Rural, Caldwell, Idaho; Southern Oregon Fruit Grower, Medford, Oregon; Oregon Agriculturist, Portland, Oregon; Pacific Northwest, Portland, Oregon; Pacific Homestead, Salem, Oregon; Fruit Magazine, Vancouver, British Columbia.

And last, but not least, splendid magazines, too, the Pacific Monthly of Portland, and the Sunset of Portland, Oregon and San Francisco. To all we wish you a happy and prosperous New Year.

If you have any plan which will be of mutual advantage, and help push the prosperity and development of the Northwest, we are ready to co-operate.

T. O'MALLEY CO.
COMMISSION MERCHANTS
Wholesale Fruits and Produce
We make a specialty
in Fancy Apples, Pears and
Strawberries
130 Front Street, Portland, Oregon

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Box Apples a Specialty
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Members of National League of Commission Merchants

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McINTOSH and TRANSCENDENT CRAB SCIONS FOR SALE
Guaranteed true to name
J. O. Read, Hamilton, Montana

Gibson Fruit Company
Not Incorporated
131 South Water Street CHICAGO, ILLINOIS

Great Central Market

We specialize in fancy Pacific Coast and Northwestern fruit. We are general distributing and Eastern marketing agents for some of the largest associations and shippers in the Northwest. We make a specialty of selling f. o. b. in transit or delivered, whichever way will realize best results for the shipper.

If you have not already arranged for the disposition of your shipments, make us your general Eastern sales agents. Will give your business special attention.

Mr. W. C. Michael, our Northwestern representative, is well known to a large number of the shippers of that section, and will be glad to call and see you during the season.

We own our own cold storage plant, the only one on South Water Street. It is an up-to-date one with a capacity for one hundred thousand boxes of apples. This, in connection with our store, places us in the best position of any one in the fruit business to protect the interests of the shippers.

We refer you to The First National Bank, Chicago, The Chicago Packer, and the Produce Reporter Company

WHAT APPLE LAND IS WORTH

Under a reliable water system and with proper conditions of soil, climate, transportation, and air drainage, the results that are being obtained where proper management is given are startling.

The following table is a very conservative estimate of the returns on our irrigated land when in bearing and under reliable handling:

No. of Trees	Age of Trees	Boxes per Tree	Total No. Boxes	Net Profit Per Box	Approx. Net Income	Per Cent on $400 Value	20 Per Cent Income on What Acre Valuation
80	4	1	80	$1.00	$ 80.00	20%	$ 400.00
80	5	2½	200	1.00	200.00	50%	1,000.00
80	6	4	320	1.00	320.00	80%	1,600.00
80	7	6	480	1.00	480.00	120%	2,400.00
80	8	8½	680	1.00	680.00	170%	3,400.00
80	9	10	800	1.00	800.00	200%	4,000.00
80	10	12	960	1.00	960.00	240%	4,800.00

SPOKANE VALLEY IRRIGATED LAND

GREENACRES OTIS ORCHARDS OPPORTUNITY EAST FARMS WEST FARMS
EAST GREENACRES PASADENA

Comprising thousands of acres of choice irrigated land adjoining Spokane

FINEST COMMERCIAL ORCHARDS ARTISTIC SUBURBAN HOMES
NEAR THE CITY ON THE ELECTRIC LINE MANY RAILROADS
The most picturesque valley in the world With every modern convenience

Our prices are still far below the older fruit districts. Our terms easy
A few more apple crops will put the Spokane Valley on a par with the best districts
Our other advantages will put it ahead of them all
Let us send you our booklet showing homes and orchards and giving facts about winter apples

SPOKANE VALLEY IRRIGATED LAND COMPANY, Inc.

401 SPRAGUE AVENUE SPOKANE, WASHINGTON

MT. HOOD APPLES "Hither Hood" is on the west slope of Mount Hood, the Portland side, thirty miles out. We duplicate Hood River in *every essential point*—soil, air and water, drainage, elevation, right organization.

We excel it in electric roads, sufficient rainfall, depth of soil that raises anything, suburban advantages. Prices one-half less. Free booklet.

MT. HOOD LAND CO., 711 Rothchild Building, Portland, Oregon.

PRINTING
FOR FRUIT GROWERS

Our facilities for the prompt handling of out-of-town orders, together with the high-class service we render, makes this a good place to buy Printing. *Better Fruit* is designed and printed in our establishment. Long Distance Telephone Main 165.

F. W. BALTES & CO.

FIRST AND OAK PORTLAND, OREGON

Sherman, Clay & Co.

Sixth and Morrison, Opposite Post Office
PORTLAND, OREGON

If You Are Not a Pianist You Need An INNER-PLAYER

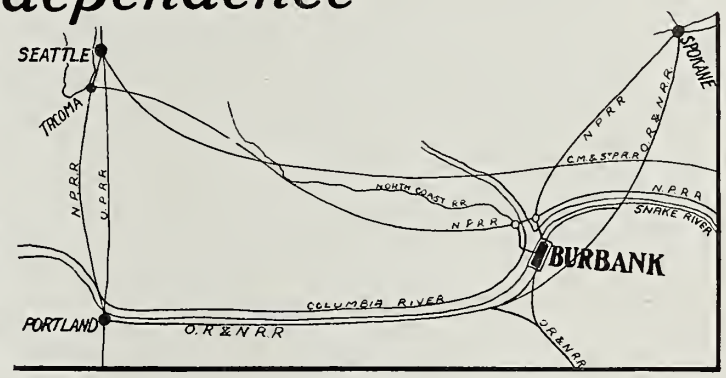
If you cannot play the ordinary piano, it is not necessary for you to sacrifice a single advantage enjoyed by those who have acquired skill in manual playing.

The Inner-Player mechanism takes the place of trained fingers and is absolutely under your control; you are at once as completely master of the instrument as you would be of an ordinary piano after years of study.

What could make a more pleasing gift than a piano which every member of the family can play?

A postal card will bring by return mail our free "Booklet B."

Ten Acres of Burbank Irrigated Orchard Land *and Independence*



A small tract in one of the choicest spots of the famous Columbia River Valley is offered in five and ten-acre tracts, with perpetual water right and clear abstract of title, at from $150 to $250 an acre, on easy terms.

In nearly every instance the prize-winning apples at the world's competitive exhibitions have come from the Columbia River basin. Yakima, Wenatchee and Hood River are beyond question the leading apple districts in the United States. Burbank lies midway between these places and is favored by the same general natural conditions.

An income is available the first year from garden truck and small fruits. The second year ten acres will support an ordinary family comfortably, and with the third year the profitable period begins.

Burbank-on-the-Columbia is in the heart of the famous early fruit belt. The first strawberries in the Seattle, Spokane and Portland markets are grown in this section. On two railroads, with these markets but one night away, these tracts at the prices asked are the best buy in Washington.

THE CLOSEST INSPECTION OF THE PROPERTY IS INVITED
PROMPT ACTION IS NECESSARY AND YOU ARE URGED TO WRITE AT ONCE
FOR BOOKLET 3, GIVING FULL INFORMATION

BURBANK LAND COMPANY **Burbank, Washington**

A suburb of Spokane, Washington, located directly on the street car line. At Vera there is a complete water system for irrigation, water being under pressure for domestic purposes; electric lights, telephones and free mail delivery, and all the advantages of the city. You can buy this land in five and ten-acre tracts. You can also select the kind of apples you want to raise and we will plant the trees and take care of them for four years, and at that time we will turn over to you a five-year-old orchard. A five-year-old orchard in any irrigated district in Eastern Washington will cost you from $1,000 to $2,500 per acre.

WRITE US FOR A BOOKLET GIVING FULL INFORMATION REGARDING OUR LAND

SHERWOOD IMMIGRATION CO. 224 Riverside Avenue, Spokane, Washington

TREES TRUE TO NAME · PLACER NURSERIES · The SILVA-BERGTHOLDT CO. NEWCASTLE, CALIF.

SELECT YOUR

Below we list in brief some of the Fruit Trees and Vines contained in our this season's stock. This does not show our complete line, but represents a collection of the best standard varieties. The descriptions given in this announcement are necessarily in an abbreviated form.

SELECTED STOCK. Our long experience as fruit growers, fruit shippers and nurserymen enable us to determine what varieties of fruit are best to ship, best to grow; best from a seller's standpoint and best from a grower's standpoint, and in propagating we cut our buds and scions only from parent trees that are the best specimens of their kind for productiveness and quality of fruit.

THRIFTY AND EXCEPTIONALLY HARDY. We grow our trees only on virgin soil, never cropping the same land a second time. Our decomposed granite soils produce exceptionally well meshed root systems and bright, highly colored, well toughened wood fiber, thus producing a tree more hardy and one that will bear transplanting better than trees grown on river bottom soils, such as commonly used by nurserymen.

THE BEST COMMERCIAL VARIETIES

APPLES

All Varieties	Each	Per 10	Per 100	Per 1000
4 to 6 feet	$0.35	$2.50	$20.00	$150.00
3 to 4 feet	.30	1.75	10.00	85.00
2 to 3 feet	.25	1.50	8.50	75.00

Yellow Transparent, yellow, flesh white, an excellent early variety, June.

Early Harvest, good for eating or cooking, last of June.

Red June, abundant bearer, June.

Red Astrochan, large, fine eating, excellent for dessert, the main reliance for an early apple, July.

White Astrachan, very large, fine for cooking, July 15.

Grovenstein, large, skin yellow, fine flavor, the best apple of the summer season, August and September.

Alexander, large, cooking, a profitable variety, August 15 to September 15.

Arkansas Black, November to March.

Baldwin, a fine winter apple, November to January.

Ben Davis, very prolific, November to January.

Grimes Golden Pippin, fine quality, a good keeper, December to March.

Jonothan, good for table or market, November to January.

Mammoth Black Twig, good size, November to March.

Missouri Pippin, good market variety, November to March.

Romba, medium to large, November to December.

Rhode Island Greening, an old standard, October to January.

Spitzenberg, the best and most profitable winter variety, November to April.

Winesap, one of the best standard varieties, November to February.

Yellow Newtown Pippin, a wonderful keeper, fine quality, very profitable, October to May.

CRAB APPLES

Red Siberian and *Yellow Transcendent.*

PEARS

All Varieties	Each	Per 10	Per 100	Per 1000
4 to 6 feet	$0.40	$3.00	$22.50	$175.00
3 to 4 feet	.35	2.50	17.50	125.00
2 to 3 feet	.25	1.75	10.00	85.00

Bartlett, the king of pears, a great money-maker; we recommend for extensive planting; July 1 to September 15.

Beurre Clairgeau, prolific, good quality, August 1 to September 15.

Doyenne de Camice, a fine fall pear and very profitable for some localities, October 15 to November 15.

Winter Nelis, profitable variety, September to October.

P. Barry, valuable winter pear, October to January.

Glaut Mareou, good variety, fine flavor, large, October to January.

Easter Beurre, good keeper, very large, splendid for dessert, October to March.

PEACHES

All Varieties excepting Fay Elberta	Each	Per 10	Per 100	Per 1000
4 to 6 feet	$0.35	$2.50	$15.00	$125.00
3 to 4 feet	.30	2.00	12.50	100.00
2 to 3 feet	.25	1.50	10.00	85.00

Fay Elberta in dormant bud, $1.00 each; $50.00 per 100.

FREESTONE VARIETIES

Alexander, profitable on account of early bearing, June 8 to 20.

Triumph, the first yellow peach, the best of the early peaches, and planted extensively by ourselves, June 12 to 30.

St. John, profitable early yellow freestone, June 28 to July 15.

Early Crawford, standard profitable variety, July 10 to 27.

Foster, good for canning, drying or shipping, July 15 to 31.

Elberto, a fine peach, good for canning or drying, excellent shipper, the standard midsummer variety, planted extensively by ourselves, July 21 to August 6.

Fay Elberto, an improved Elberta, Its firm, fine grained texture makes it superior to Muir or Lovell for canning, and also an improvement over Elberta for its shipping quality, being as productive and regular in bearing as the Elberta and better than any peach. Now the most desirable midsummer peach for all purposes. We plant them extensively ourselves and we heartily recommend this variety. Canned, it does not rag out. July 31 to August 20.

Late Crowford, an old standard, July 24 to August 13.

Susquehanna, an old standard, July 22 to August 15.

Muir, a splendid drying and canning freestone, July 27 to August 15.

Lovell, prolific, good for shipping, drying or canning, August 5 to 20.

Picquett's Late, regular bearer, good all-round peach, August 15 to 25.

Salway, the best late peach, August 25 to September 15.

CLINGSTONE VARIETIES

Tuscan Cling, early, prized by canners, July 13 to 27.

Runyan's Orange Cling, splendid for canning, August 5 to 20.

Phillips Cling, the best for canning, August 26 to September 15.

Levi, good bearer, good for Eastern shipment, desirable for canning, September 2 to 25.

PLUMS

All Varieties excepting Santa Rosa	Each	Per 10	Per 100	Per 1000
4 to 6 feet	$0.40	$3.00	$22.50	$175.00
3 to 4 feet	.35	2.50	17.50	125.00
2 to 3 feet	.25	1.75	10.00	85.00

Santa Rosa, $1.00 each for 1-year-old trees.

Clyman, earliest plum for distant shipping, June 3 to 17.

Tragedy, good money-maker for some sections, a fine plum, June 10 to 17.

Climax, Burbank's king of early plums; planted extensively by us and recommended as best early plum for profit; June 15 to July 3.

Santa Rasa, best of Burbank's recent creations, June 25 to July 15.

Burbank, good, profitable and prolific, June 28 to July 15.

Wicksan, a good variety, July 10 to 25.

Green Gage, fine flavor, good canner, July 10 to 20.

Kelsey, a profitable shipper, July 20 to August 10.

Sugar Prune, good for shipping or drying, July 20 to August 5.

Bradshaw, old standard, profitable, July 10 to 25.

Imperiol Prune, strong and productive, valuable drying variety, July 25 to August 5.

Diamond, vigorous grower, very productive; planted extensively by ourselves; very profitable and one of the best midsummer plums for Eastern shipment; July 15 to August 5.

Jefferson, good for canning, August 1 to 15.

Fallenburg, a fine late variety, August 1 to 15.

Germon, a standard, late shipper, August 15 to September 1.

Yellow Egg, good for canning, drying and Eastern shipment, August 1 to 10.

Giont, splendid Eastern shipper, August 1 to 15.

Grond Duke, a fine large plum and profitable, planted extensively by ourselves, August 10 to 20.

French Prune, the standard for drying, August 25 to September 15.

APRICOTS

All Varieties	Each	Per 10	Per 100	Per 1000
4 to 6 feet	$0.40	$3.00	$25.00	$200.00
3 to 4 feet	.35	2.50	20.00	150.00
2 to 3 feet	.25	1.75	10.00	85.00

Royal, splendid for drying and shipping, June 1 to 20.

Blenheim, prolific bearer, highly prized by canners, fine quality, good dryer and good shipper, June 15 to 30.

Routier's Peach Apricot, June 20 to 30.

Tilton, a late bloomer, fine quality and good bearer, June 15 to 30.

Hemiskirk, very hardy, regular bearer, June 20 to 30.

Moarpark, a fine large 'cot, June 25 to July 10.

CUT OFF THE COUPON AND MAIL TODAY

Nursery Department
Silva-Bergtholdt Co.
133 Orchard St., Newcastle, California

Gentlemen: Please send me by mail your free catalogue and suggestions to planters.

Name .....

Address .....

OUR CATALOGUE is more than a catalogue in one sense of the word, for the reason that, besides listing all the Fruit Trees, Vines, etc., that we sell, it contains many valuable hints on The Time to Plant; How to Plant; Cultivation; Common Fruit Pests and Their Treatment, as well as the necessary remedial solutions and formulas for the purpose. We shall be glad to mail this catalogue free to all who wish, whether they intend to purchase or not. Write today; the information it contains may save you many dollars.

OUR PRICES are reasonable. Though they may not be the cheapest, yet the cheapest is not always the best.

OUR TREES are the best that care in selection and growing can produce.

FRUIT TREES NOW

TREES TRUE TO NAME. THE SILVA-BERGTHOLDT CO. NEWCASTLE, CALIF. PLACER NURSERIES

Our catalogue gives full details concerning each variety, together with our personal observations and recommendations. The dates given after descriptions are the period of ripening. We are selling out fast in some varieties.

TRUE TO NAME. All buds and scions are cut by our nursery foreman from trees that have been under his personal observation and that are marked for this purpose when they are in fruit, and we exercise every care known to avoid the possibility of an error. You can rely that our stock is not only true to name, but is propagated from the best of its kind.

ORDER NOW. Do not wait until you are ready to plant before making your selection. Order now and thus be assured of just the varieties you desire. We are selling out fast in the most desirable varieties, so do not delay. Give the matter careful thought and consider what is best suited for your locality and best for profit. If undecided, consult some successful orchardist or write us and we will gladly give you the benefit of our experience.

THE BEST COMMERCIAL VARIETIES

CHERRIES

All Varieties on Mazzard and Mahaleb Root.

	Each	Per 10	Per 100	Per 1000
4 to 6 feet	$0.40	$3.00	$22.50	$175.00
3 to 4 feet	.35	2.50	17.50	125.00
2 to 3 feet	.25	1.75	10.00	85.00

Early Purple Guigne, the earliest marketable cherry, April 20 to May 1.
Knight's Early Black, earliest good cherry, April 25 to May 10.
Early Chapman, large black, good shipper, early, May 1 to 10.
Black Tartarian, standard black cherry, profitable shipper, May 7 to 25.
Bing, fine large black cherry, May 18 to June 5.
Royal Anne, the standard canning cherry and an excellent shipper, May 18 to June 10.
Black Oregon, favorite for distant shipping and good money-maker, May 26 to June 15.
Lambert, large black cherry, excellent shipper, June 5 to 20.

QUINCES

All Varieties	Each	Per 10	Per 100	Per 1000
4 to 6 feet	$0.40	$3.00	$25.00	$175.00
3 to 4 feet	.35	2.50	20.00	125.00
2 to 3 feet	.25	1.75	10.00	85.00

Orange, standard variety, vigorous and productive, September 5 to October 15.
Rea's Mammoth, a fine large quince, September 15 to November.
Champion, excellent quality, good size, October 1 to November.
Pineapple, bears young and regularly, productive September 1 to October 1.

PERSIMMONS

All Varieties	Each	Per 10	Per 100	Per 1000
3 to 4 feet	$0.45	$3.00	$17.50	$150.00

Hachiya, large and handsome fruit, prolific, October and November.
Tsurunoka, rapid grower, good bearer, one of the best, October and November.
Hyakume, early, large, prolific, October and November.
Dai Doi Maru, one of the best for eating, prolific, October and November.
Tone Noshi, very fine fruit, productive, standard variety, October and November.
Gashia, very productive, one of the best for quality and market, October and November.
Mammoth Goshio, new production, extra large fruit, October and November.

GRAPES

All Varieties	Each	Per 10	Per 100	Per 1000
No. 1 rooted vines	$0.10	$0.75	$3.50	$20.00
No. 2 rooted vines	.10	.50	2.50	15.00

Fantoinbleau, valuable as the earliest shipping grape, July 1 to August 15.
Thompson Seedless, good shipper and dryer, August 5 to 20.
Black Prince, best early black grape, August 12 to September 5.
Rose Peru, good bearer and profitable black grape, August 12 to September 5.
Blue Malvoise, an excellent grape for certain localities, August 18 to September 1.
Malaga, the best white grape for Eastern shipment.
Purple Damoscus, attractive grape and a good shipper, August 25 to September 10.
Tokay, a table grape of profitable standard, August 18 to November 1.
Black Morocco, fine large black grape, good bearer, September 3 to October 15.
Carnichon, large oval fruit, good shipping quality, September 6 to November 1.
Black Ferrero, delicious table grape of valuable market variety, September 5 to October 15.
Emperor, desirable market variety, October 15 to November 15.

ORANGES

	Each	Per 10	Per 100
1-year-old buds, ½ to ⅝	$1.50	$13.50	$125.00
1-year-old buds, ⅜ to ½	1.40	12.50	110.00

Washington Navels, the most popular orange grown, very hardy and prolific bearer.
Thompson Improved Navel, a good keeper and valuable as a good shipper.
Valencia Late, a fine orange, late keeper, being in prime condition when other varieties are out of market.

LEMONS

	Each	Per 10	Per 100
1-year-old buds, ½ to ⅝	$1.50	$13.50	$125.00
1-year-old buds, ⅜ to ½	1.40	12.50	110.00

Eureka, a good keeper and very popular.
Villa Franca, considered to be the best of all lemons, will stand a lower temperature than any other variety.

POMELO

Marsh's Seedless, rich meat, good keeper, popular variety.

NUT FRUIT

ALMONDS

All Varieties	Each	Per 10	Per 100	Per 1000
4 to 6 feet	$0.40	$3.00	$25.00	$200.00
3 to 4 feet	.35	2.50	20.00	150.00
2 to 3 feet	.25	1.75	10.00	85.00

Drake's Seedling, medium hard shell, abundant and regular.
I X L, soft shells, perfect, highly recommended.
Ne Plus Ultra, soft shells, heavy, and regular bearer.
Nonpareil, paper shell, one of the best.
Peerless, fine, popular variety, large nut.
Texas Prolific, wonderfully productive.

WALNUTS

	Each	Per 10	Per 100	Per 1000
6 to 8 feet	$1.00	$5.00	.....	.....
4 to 6 feet	.65	4.00	$35.00	$250.00
2 to 4 feet	.50	3.50	30.00	200.00

Ford's Improved Soft Shell, thin shell, sweet kernel.
Franquette, a late bloomer, nuts command the highest market value.
Mayette, fine dessert nut and a sure bearer.
Santa Barbara Soft Shell, a favorite variety in Southern California.

PECANS

All Varieties	Each	Per 10
6 to 8 feet	$1.00	$7.00
4 to 6 feet	.75	5.00
3 to 4 feet	.60	4.00

Paper Shell, nuts of superior quality.
Stewart, a standard commercial variety, very profitable.

FIGS

All Varieties	Each	Per 10	Per 100	Per 1000
4 to 6 feet	$0.50	$3.00	$20.00	$175.00
3 to 4 feet	.40	2.50	18.00	150.00
2 to 3 feet	.30	2.00	15.00	125.00

White Adriatic, the standard white fig.
Calimyrna, the best of Smyrna varieties.
Capri, to fertilize the Smyrna varieties.
Mission, the best black fig.
San Pedro, fine large black fig, good flavor.

OLIVES

All Varieties	Each	Per 10	Per 100
4 to 6 feet	$0.75	$6.00	$50.00
3 to 4 feet	.60	4.50	40.00

Manzanilla, very large, fine for pickles and oil.
Mission, a fine large olive, most largely grown in California.

BERRIES

RASPBERRIES

	Each	Per 10	Per 100	Per 1000
Rooted plants	$0.10	$0.75	$2.50	$15.00

Hansel, early, good shipper, May 22 to June 15.
King, good size, an excellent shipper, June 2 to 28.
Cuthbert, large, a good shipper, June 10 to July 1.

STRAWBERRIES

	Each	Per 10	Per 100	Per 1000
Rooted plants	$0.10	$0.50	$2.50	$15.00

Dallar, the best market berry; first crop, April 28 to June 5; second crop, June 11 to October 1.

BLACKBERRIES

	Each	Per 10	Per 100	Per 1000
Rooted vines	$0.10	$0.75	$2.50	$15.00

Lucretia Dewberry, earliest and best blackberry, fine flavor, very prolific, June 1 to July 5.
Lawton Blackberry, large, black, excellent quality, best late blackberry, June 25 to August 15.

LOGAN AND PHENOMENAL BERRIES

	Each	Per 10	Per 100	Per 1000
Rooted tips	$0.10	$0.75	$5.00	$35.00

Both fine large berries, combining the flavor of both raspberry and blackberry, splendid for dessert, jelly or jam.

GOOSEBERRIES

	Each	Per 10	Per 100
Strong 1-year plants	$0.15	$1.00	$6.00

Oregon Champion, very large fruit, brownish, profitable for canning.

CURRANTS

	Each	Per 10	Per 100
1-year-old plants	$0.15	$1.00	$6.00

Cherry, large, deep red, fine for preserving, valuable market variety.
Fay's Prolific, very large, prolific, profitable.
White Grape, large, yellowish white.

THE SILVA-BERGTHOLDT CO.

FRUIT GROWERS, FRUIT SHIPPERS AND NURSERYMEN

133 ORCHARD STREET NEWCASTLE, CALIFORNIA

JUST GROWS—THAT'S ALL

THE firm of Silva-Bergtholdt Company originated in 1899, and succeeded to the nursery business of C. M. Silva & Son. In 1899, in connection with our nursery business, we undertook also, in a small way, the shipment of fruit, likewise fruit growing. Our business has each year shown an increase over the year preceding, so that now, in the tenth year of our existence, we rank among the old established fruit shippers in the county, and as fruit raisers we have a larger acreage bearing and non-bearing, than any other fruit grower or firm of fruit growers in the county.

We are essentially fruit growers and nurserymen, using the fruit business as a means of disposing of our own crops, and those we control, and also to keep in more vital and closer touch with the fruit business. And in the nursery business we aim to combine with our knowledge and experience as nurserymen, also our knowledge and experience as fruit growers and observation of conditions as fruit shippers, giving us an unequaled range of experience and observation in the fruit business.

Being thus widely interested in all phases of the business, we know not alone what are the best varieties of fruit to produce for market, but we know how to propagate and how to grow a good tree. For that reason also we do not catalogue every variety of fruit known, many of them not worthy of cultivation, as is common with nurserymen, but we propagate and offer for sale only those varieties that are known to be of merit, and in our recommendation we recommend those only that are the best.

We grew and shipped last year some forty-five carloads of fruit trees and vines. Our stock this year is of still larger proportion and it is our intention to grow in future also a full line of all varieties of ornamentals, trees, shrubs, vines and decorative plants. We are making a specialty also of experimenting and trying out every new introduction in fruits, and before any are listed in our stock the same are given our personal test.

VEHICLES
AND AGRICULTURAL
IMPLEMENTS
THE BEST OF
ORCHARD AND GARDEN TOOLS
A SPECIALTY
GILBERT - VAUGHAN
IMPLEMENT CO.
HOOD RIVER, OREGON

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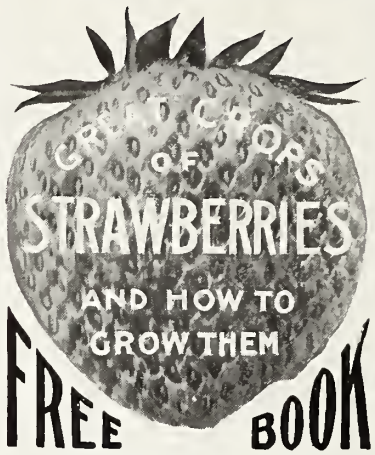
Hood River, Oregon
Headquarters for
FARMING AND ORCHARD
TOOLS
Disc Harrow Extension for
Orchard Cultivation a Specialty
When you want any kind of Orchard
Tools come to me and get the Best

Our 1910 Edition of
"Great Crops of Strawberries and How to Grow Them"



has been re-written from cover to cover. It is the most valuable text book on strawberry-growing ever put into print, because it teaches the Kellogg method of growing larger crops of better berries than can be grown in any other way. Every detail of the work is illustrated by photo-engravings and is explained in such a plain and practical manner that anyone who will read the instructions and study the pictures is sure to succeed.

Strawberry Growers
Who Follow
The Kellogg Way

Are Getting More Fancy Berries from One Acre than the Other Fellow Gets From Two

The book makes you acquainted with some of these top-notch growers, shows pictures of their strawberry fields, and tells about the big yields. The man who wrote this book is the world's greatest strawberry expert. He has 110 acres in strawberries and every word is written from actual experience. He tells you how to increase the fruiting-power of the plants, and how to enrich the soil to make the plants do their best. He also shows you how to prune and set the plants, and how to mate them to insure a perfect berry from every bloom; how to layer runners to make an ideal row; when and how to cultivate; gives full instructions about spraying, mulching, picking, packing and marketing—all these essential features, as well as everything else pertaining to the work, are made perfectly plain by pictures. Besides all this the book explains how the Kellogg strain of thoroughbred plants is produced, and gives positive proof that

These Famous Plants Have Won the World's Highest Fruiting Record

The book also shows pictures of fifty-four different kinds of strawberries, with a complete description of each variety.

We feel mighty proud of this book. It is surely worth its weight in gold to anyone who has an ambition to become an independent, money-making strawberry grower. If you want one, just say so, **but don't send any money**. This ad says the book is free, and what we say we do, we do do, and no backing out.

R. M. Kellogg Company
Box 355, Three Rivers, Mich.

Kellogg's Thoroughbreds Grow Bumper Crops

MORE than 13,000 quarts of strawberries to the acre is the 1908 record of O. J. Wigen, of Creston, B. C., who writes as follows, under date of July 28, 1908: "Having just finished the marketing of 53,000 quarts of strawberries from a little over four acres of ground set with your Thoroughbred Pedigree Strawberry Plants, I feel it my duty to let you know of the performance of your plants in this part of British Columbia; and I would add that, under a more perfect system than I have been able to follow, this yield can be greatly increased." O. J. Wigen.

"Great Crops of Strawberries" Worth $100.00 to Him

FARM JOURNAL, 1025 Race St.
Philadelphia, Feb. 20, 1908.
R. M. Kellogg Co., Three Rivers, Mich.
Gentlemen: We have a letter this morning from Thomas B. Magee, of Browning, Montana, in which he says, "I have derived great benefit from your advertisements, especially the R. M. Kellogg Co., of Three Rivers, Mich., whose Strawberry Book is worth a hundred dollars to anyone interested." With best wishes. Very truly yours,
WILMER ATKINSON CO.,
Chas. F. Jenkins.

OLIVER'S SPECIAL
ORCHARD PLOWS
No. 7 V

Write for Circulars or call on your Nearest Dealer

Handles and Clevis Adjustable

Chilled or Steel

Showing plow from rear, as if at work among trees, wheel inside of landside line. Hub of wheel does not project to strike trees. All levers down. Third base can easily be attached.

No. 17 Two or Three Furrow Gang

Oliver Chilled Plow Works
Portland, Oregon South Bend, Indiana San Francisco

SEED Catalog NOW READY

We want every Farmer, Gardener, Poultryman and Stockman to have a copy of our new Seed Book. It contains 120 pages of everything needed to make a success of farming in the West. In this respect Lilly's Seed Book is better and more authentic than other publications of this nature. It is the experience of over twenty-five years of honest seed selling in the West.

LILLY'S Seeds are Best for the West and ar sold by your dealer. Send today for new catalog.

THE CHAS. H. LILLY CO.
SEATTLE PORTLAND

We are introducing this year an improved midsummer freestone peach, combining all of the desirable features of the famous Elberta, but owing to its fine grain and firm texture being superior to the parent variety and having in addition to its desirable shipping quality, a texture that for canning is superior to either Muir or Lovell. Canned, it does not rag out and will hold its form as well as any of the standard canning clings. It is also an excellent peach for drying and will constitute without exception the best peach of the summer season, for all purposes, superior to any other for market—the best known freestone for canning, and equal to any for drying.

It might be well also to state that we are enlarging our planted acreage each year, that we are widely interested in the success of the fruit and nursery business, and that our efforts are put forth in that direction, and that growers purchasing their trees from us can rely on their being not alone true to name, but also the best that good care can produce.

Furthermore, with our knowledge and experience in the fruit business, growers also can rely on what recommendations we may make for their planting.

"THE OLD RELIABLE"

Albany Nurseries

INCORPORATED

ALBANY, OREGON

LARGE STOCK, FIRST-CLASS TREES

Place Your Orders Now

CATALOGUE FREE

MORE SALESMEN WANTED

CLARK'S SEEDLING

The Berry that made Hood River famous

The stock for spring planting is the largest and I beleive the best that I have ever grown. Prices and further information furnished on application.

A. WHITEHEAD
HOOD RIVER, OREGON

Hood River Nurseries

Have for the coming season a very complete line of

NURSERY STOCK

Newtown and Spitzenberg propagated from selected bearing trees. Make no mistake, but start your orchard right. Plant generation trees. Hood River (Clark Seedling) strawberry plants in quantities to suit. **Send for Prices**

RAWSON & STANTON, Hood River, Oregon

We Were Awarded

Gold Medal

AT THE
ALASKA-YUKON-PACIFIC EXPOSITION
IN SEATTLE, 1909

For Display of

Nursery Stock

The Sunnyside Nursery Company

INCORPORATED $100,000

Main Office and Nurseries at Sunnyside, Wash.

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Trees of Quality?

You are either not interested in "Trees of Quality," or you have not investigated for yourself what The Winfield Nursery Company is doing in the horticultural world.

Our booklet, "Trees of Quality and What Others Say of Them," illustrates our system of breeding up and selecting the best. It further tells of the big commercial planters' experience with The Winfield Nursery Company's trees in irrigated districts.

Best Scions from Your Own Country

Do you know we now have men in your locality visiting the best orchards to mark them, showing improved individuality from which to select scions? Mail coupon at once.

The Winfield Nursery Co.
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COUPON

I am interested in "Trees of Quality" and will plant about ..... trees. Mail free of charge your booklet.

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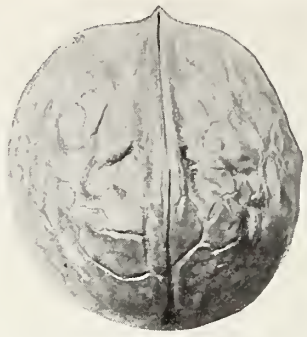

The only really immune commercial walnut; blooms late, but matures earlier than Franquette; is a heavy bearer, and nut a true Grenoble type. Franquette in the same orchard in San Jose, California, blights badly

LEONARD COATES NURSERY CO., Inc.

Sole Distributers Morganhill, California

The Wapato Nurseries

TIM KELLY, *Proprietor*

Sales Office: North Yakima. Nursery and Business Office: Wapato, Wash.

1,500,000 Fruit Trees ***1,500,000 Fruit Trees***

WE BELONG TO NO TRUST

We guarantee our trees absolutely true to name. Our stock has been "the standard of excellence" wherever placed. Our system of budding and grafting, and the admirable location of our nurseries, together with our long experience in California and other Western states in planning and planting orchards, makes our advice invaluable to beginners and to those who contemplate commercial orchards. See us

Get our Prices. Remember the Best is Always the Cheapest

Russellville Nursery Grows Trees of Quality

ACKNOWLEDGED BY MANY LEADING NURSERYMEN AND FRUIT GROWERS TO BE THE BEST GROWN ON THE COAST

For commercial orchards we quote the following: 100,000 apple, 50,000 cherry, 50,000 pear and other stock in proportion. Thirty acres of ornamental trees. See our stock and get prices before buying elsewhere. No agents.

Mention "Better Fruit" H. A. LEWIS, Proprietor, Montavilla, Oregon

FRUIT GROWERS, YOUR ATTENTION!

Royal Ann, Bing and Lambert cherry trees; Spitzenberg and Newtown apple trees; Bartlett, Anjou and Comice pears, and other varieties of fruit trees

A. HOLADAY MONTE VISTA NURSERY SCAPPOOSE, OREGON

OUR TREES ALWAYS PLEASE

Satisfaction guaranteed

A NICE ASSORTMENT OF COMMERCIAL VARIETIES

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FINE NURSERY STOCK, FRUIT, NUT AND ORNAMENTAL TREES, SHRUBS AND ROSES

Have No Agents Direct to Planter Send for Catalogue

PRIZE WINNERS AT THE SPOKANE APPLE SHOW

Continued from Page 41

Sutton Beauty—J. L. Webster, Vernon, British Columbia.

Shackelford—First, D. W. Roderick, Wenatchee; second, O. A. Hoag, Chelan.

Scotts Winter—First, Coldstream Ranch, Vernon, British Columbia; second, Mrs. John Smith, Spences Bridge, British Columbia.

Swaz Pomme Grise—R. Sweeny, Kelowna, British Columbia.

Smokehouse—O. G. France, Wenatchee.

Springdale—R. P. Wright, Lakeside.

Titovka—W. B. Harlan, Como, Montana.

Tolman Sweet—First, E. France, Wenatchee; second, I. W. Cockle, Kaslo, British Columbia.

Tompkins King—First, C. E. Atkinson, Mead; second, C. J. Johannsen, Spokane.

Twenty-Ounce Pippin—First, George H. Farwell, Wenatchee; second, R. H. Fortune, Salmon Arm, British Columbia.

Utter—Charles Grant, Methow, Washington.

Vandevere—First, J. L. Webster, Vernon; second, G. H. Webb, Cedaredge, Colorado.

Virginia Beauty—J. R. Hill, Peach, Washington.

Wagener—First, Peter King, Selah; second, Harry E. Nelson, Chester, Washington.

White Winter Pearmain—First, A. H. Heney, North Yakima; second, E. France, Wenatchee.

Wealthy—First, C. E. Atkinson, Mead; second, J. Farran, Harrop, British Columbia.

Winter Banana—First, R. P. Wright, Lakeside; second, Richard M. Harrison, Cashmere.

Walbridge—First, J. I. Pogue, Omak; second, Ida Fobes, Cedonia, Washington.

Westfield or Seek-No-Further—First, Charles Rinck, Mead; second, T. L. Capell, Hillyard, Washington.

Wolf River—First, Lorr & Ball, Methow; second, George H. Farwell, Wenatchee.

Winesap—First, Tedford Brothers, Wenatchee; second, H. L. Tedford, Wenatchee.

Willow Twig—First, J. R. Hill, Peach; second, R. P. Wright, Lakeside.

Whitney No. 20—C. E. Atkinson, Mead.

PORTLAND WHOLESALE NURSERY COMPANY

Rooms 1 and 2 Lambert-Sargeant Building

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PORTLAND, OREGON

RICHLAND NURSERY

Richland, Washington

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Complete stock of leading varieties of Apples, Pears, etc.

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An Improved Freestone Peach

The best for canning, drying and market. *Fay Elberta Peach.* Superior to Muir or Lovell for canning or drying, and superior to any for market. A heavy and regular bearer, very attractive, firm, and of exceptionally fine flavor. Write for descriptive circular.

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Outfit free

Salem Nursery Company, Salem, Oregon

AGENTS

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20,000 Pear, Bartlett & Anjou
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For Northwest Fruit Growers in General

A FULL STOCK OF

Spitzenberg
Jonathan, Winesaps
Rome Beauties
Etc.

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The Best are the Cheapest!

ROSES! ROSES! ROSES!

Try getting your Rose Bushes from **The Sibson Rose Nurseries** of Portland, Oregon.

Popular varieties at popular prices. Also the most beautiful new introductions. They are the leading and largest growers and importers of fine Roses in the Northwest.

Once a customer, you will not want any other Roses.

Shipped only by express, plants being too large for mailing.

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VINELAND NURSERIES COMPANY

Propagators of

RELIABLE NURSERY STOCK

All Stock Budded from Bearing Trees, Fruit and Ornamental

CLARKSTON, WASHINGTON

Whitney Russet—Mrs. John Smith, Spences Bridge, British Columbia.

Yellow Bellflower—First, Lorr & Ball, Methow; second, Tedford Brothers, Wenatchee.

York Imperial—First, O. G. France, Wenatchee; second, L. R. Bailey, Wenatchee.

Yellow Newtown—First, W. A. Ballinger, Methow, Washington; second, Western Oregon Orchard Company, Medford, Oregon.

L. F. Williams Twice-Winner Cup: For the best ten boxes of Rome Beauty apples—R. M. Harrison, Cashmere, Washington.

Grasseli Chemical Company Cup: For second best ten boxes of Winter Banana apples—George B. Spencer, Entiat, Washington.

Tull & Gibbs Cup: For the most firsts, seconds and thirds of all kinds—Ellsworth France, Wenatchee, Washington.

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Roy, Utah

FULL LINE of Fruit, Shade and Ornamental Trees, Roses, Shrubs, etc. Our Apples, Cherries, Pears and Apricots specially fine this year, one year old. Leading varieties of Apples yet in stock: Ben Davis, Gano, Missouri Pippin, Mammoth Black Twig, Spitzenberg, York Imperial, Rome Beauty, Winter Banana and Winesaps. Submit your list for prices.

Burpee's Seeds that Grow

140 VARIETIES *ANY QUANTITY*

Plenty of stock in our 40,000 pounds

Growing Plants as Season Requires
All Makes High Grade
Pruning Tools
Garden Tools
Hose and Spray Nozzles
International Stock and Poultry Food
International Remedies
Incubators and Brooders
Everything for Building
Everything for Furnishing

Stewart Hardware & Furniture Co.

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THE KIND YOU CAN'T KEEP IN THE GROUND

They grow, and are true to name.
Write for prices on your wants.

188 Front Street J. J. BUTZER Portland, Oregon

Poultry Supplies, Spray, Spray Materials, Fruit Trees, Etc.

WHAT ARE YOU GOING TO PLANT?

Tokays, Cornichon, Muscat or Malagas

We have them, strong, well-grown one-year vines, finest in the land

How do BARTLETTS strike you this season? Plenty of them, stock cannot be beaten, and prices right. Then how's SPITZENBERG, YELLOW NEWTOWN PIPPIN and YELLOW BELLEFLEUR?

One nurseryman visiting our Nursery said, "Gentlemen, you should be proud of this stock," and we are. So will you be when you plant it.

What about CHERRIES? BING, LAMBERT, BLACK TARTARIAN, ROYAL ANNE and CHAPMAN. It would not be hard to sell you these, could you see them.

PEACHES, stocky, well grown, and, say, they have the roots, plenty of them, and not cut off at top of ground.

Another thing: Our prices are RIGHT, we dig our stock RIGHT, handle it RIGHT, treat you RIGHT, and it is sure RIGHT in every way. Write us and we will tell you all about it. Better still, come and see us and we will show you.

CHICO NURSERY CO. Chico, California

JONATHAN

APPLE TREES

Stocky,
Splendidly Rooted and
Fully Matured

Reliable and Dependable

Also WINESAP and
All Other
Commercial Varieties

Pears, Peaches, Cherries
and Full Line Small Fruits

NORTHWEST NURSERY CO.

GROWERS

North Yakima, Wash.

Nurseries:

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From nursery direct to the planter, the world's standard trees (Stark Trees) are now sold at

25% DISCOUNT TO MAIL ORDER BUYERS

FOR ALL CASH-WITH-ORDER BUSINESS. In addition to giving this liberal discount, we also prepay freight to any point in the United States, on orders amounting to $10 or more, box and pack shipments without extra charge (most nurserymen make extra charges for boxing and packing), guarantee safe arrival, give generous premiums and assure every customer complete satisfaction.

Why We Make This Offer

Heretofore Stark Trees have been sold through salesmen, to whom we have paid a commission for sending us your orders. We have now discontinued selling through salesmen and are dealing direct with the planter in the irrigated valleys and orchard regions of the West. Thus the commissions formerly paid are saved—and given to you.

Our Catalogue-Price-List Is Our Only Salesman

In this state, and it is a top-notch salesman, too—better by far than most men salesmen. Every question you could ask, it will answer, and the answer will be correct—not a guess. Every variety in all classes is fully described, strong and weak points are pointed out—(everything is not listed as "best," as is the case with most nurserymen's literature). Following each variety is a key indicating the section of the country where experience has proven that variety will succeed.

This book contains accurate and valuable information on methods of planting, fertilization, cover crops, planting and care of trees, suggestions for spraying, pruning, etc., etc. Over 150 illustrations from actual photographs are within its pages.

You could not ask for a better salesman than is our catalogue-price list. With it in your hands you can order more successfully, conveniently, and with better results than you could by talking to the best informed nursery salesman. Send for it today.

Have You Planted Stark Delicious?

If not make it the first and biggest item on your next order—you'll never regret it. Delicious is the most wonderful apple known to horticulture for quality, keeping qualities and selling value. This year at the sale of the Wenatchee Valley (Washington) Fruit Growers' Association, Delicious brought $3 per box f. o. b. there (the present market value is $4), while Spitzenberg brought only $2.50, Winesap $2.25, Jonathan $1.90, Black Ben $1.75 (now $2, selling with Jonathan), Baldwin $1.15, Ben Davis $1.40, Gano $1.50, etc.

Luther Burbank, wizard of horticulture, says: "Delicious is a gem, the finest apple in all the world. It is the best in quality of any apple I have so far tested"—and Luther Burbank knows.

Delicious Brings $2,000 Per Acre.—One hundred seven-year-old Stark Delicious apple trees in the Bailey orchard, Chelan County, Washington, earned $2,000 for their owner last year and when prices were low—or an average of $20 per tree for one season's crop.

Delicious is today making more profits—big profits, for the long-headed, far-sighted orchardists who have planted it than any other variety. Write for "The Apple Stark Delicious," a booklet giving its full history and the opinions of the world's greatest horticulturists and successful orchardists. It will convince you. Last year we sold 1,250,000 trees of Delicious alone and could have sold another quarter million had we had them. Planters nowadays do not buy a variety at that rate unless there's a reason. And there is one—send for the booklet.

Stark King David Apple

You should plant it along with Delicious—plant it largely—you'll never regret it. It's a money-maker and a big one. It has highest quality, is a long keeper, very hardy, and has beautiful color. Sells at highest prices. Many planters think it better than Delicious.

In my opinion King David will surpass Delicious as a commercial apple. It is fine as silk. —Rev. T. H. Atkinson, Entiat, Washington.

Was in Mr. Olds' orchard last week. His King David three-year-old trees will bear quite a lot of fruit this year. I consider them far ahead of Jonathan—the fruit is larger, has better color and flavor, and is a better keeper.—D. J. Hayden, Chelan County, Washington.

King David stood 25 degrees below zero last winter without injury, while Ben Davis suffered severely.—R. G. McDougall, Chelan County, Washington.

King David, a very rich red, makes a most beautiful apple. Hangs on the tree well, equal to Ben Davis and just as productive; quality is equal to Spitzenberg; picked three boxes from one scion grafted on Ben Davis. It is the finest apple you have for this part of the country; the most beautiful apple grown; can't help but sell anywhere, and ahead of all others. Have heard nothing but King David all this season. Have had to date fifty-two parties at my place to see these apples.—F. Dando, Chelan County, Washington.

Include King David in your next order. You'll never regret it and will want more when you see its magnificent fruit.

Stark Early Elberta Peach

One of the good things you cannot afford to overlook. It is winning golden opinions from experienced fruit men the country over. Better quality than Elberta and ripens ten days to two weks earlier, reaching the markets when all other good peaches are scarce, and thus commanding high prices. A great shipping peach, surpassing Elberta.

I believe Early Elberta is one of the best varieties introduced since the first Elberta came. In Early Elberta one has all of the good qualities of Elberta, and the additional feature of early ripening. When this is taken into consideration, and when it is planted along with the original Elberta, much of the strain and congestion which comes with peach harvest will be greatly reduced. The shipping season will be lengthened.—E. H. Favor, assistant horticulturist, Davis County, Utah.

Having tested its shipping and keeping qualities thoroughly, without doubt it is the most valuable addition to the commercial peach list introduced in recent years; an excellent shipper, and as a keeper it has no rival.—L. Marsh, horticultural inspector, Davis County, Utah.

J. H. Hale (the peach king) wrote me that he took some Early Elberta home from Georgia and that they kept nearly twice as long as Elberta.—Dr. Sumner Gleason (originator of Stark Early Elberta), Davis County, Utah.

Early Elberta is all right. Two trees bore fine, yellow, spicy fruit, and although not a full crop, it was more than was produced by fifty Elberta trees in the same orchard. Ripened with Carman.—E. H. Riehl (Illinois Experiment Station) president Alton Horticultural Society, Madison County, Illinois.

Stark Early Elberta is worthy of your utmost confidence—plant it largely and reap the harvest of profits which will surely follow. The true Stark Early Elberta can be had only of us. We purchased the exclusive propagating right from the originator, Dr. Sumner Gleason.

Other Western Varieties

The success of an orchard is dependent upon the judgment displayed in the selection of varieties—the profit-paying kind. And profit in fruit growing means quality. Quality and color are the two things that the great fruit consuming public pay their money for. That's certain—you can't deny it.

Increase your orchard profits—do it by planting the splendid tested special sorts of Stark Trees. Begin now—don't wait until next season. Plant now and be that much nearer a big profit-paying crop than you would be by waiting six months or a year.

Here is a brief list of varieties highly adapted to Western conditions—the kind that will make a model orchard which will yield profitable returns:

Apple—Senator, Banana, Jonathan, Newtown, Black Ben, Spitzenberg, Rome Beauty, L. Raspberry, Stark Delicious, Stayman Winesap, Stark King David.

Peach—Muir, Alton, Elberta, Lovell, Krummel, Red Bird, Crawford, Levy Late, Phillips Cling, S. E. Elberta, June Elberta.

Grape—Mission, Worden, Niagara, Campbell, Flame Tokay, Stark Eclipse, Moore Early, White Muscat, Stark King Philip, Black Corniehon, Thomp's Seedless.

Cherry—Bing, Lambert, Royal Anne, Montmorencies, Royal Duke, Black Tartarian.

Apricot—Royal, Tilton, Blenheim, Moorpark, Colorado, Wenatchee.

Pear—Anjou, Bartlett, Lineoln, Comice, Winter Nelis, Easter Beurre.

Our stock of the above and all other varieties worthy of propagation is complete in every sense of the word—all sizes in one and two-year, but only one quality—"Stark Sterling Quality."

Fast Daily Freight Service

Because of a vast volume of business we are able to maintain a daily fast through refrigerator freight service to Western points, thus insuring the arrival of all shipments in perfect condition. *Remember, we pay the freight on $10 orders, and guarantee safe arrival.*

USE OUR SPECIAL SERVICE DEPARTMENT FREE—If you contemplate planting an orchard in either a large or small way, let us assist you. Our Special Service Department will advise you as to best varieties for commercial or home orchard, best methods and time of planting in your locality, spraying, care of trees, and other valuable information. This service is given without charge and will in no way obligate you to buy of us. The department is maintained to promote greater interest in the planting of the best and most profitable varieties of fruit known. Address

Stark Bro's Nurseries & Orchards Company

Lock Box Number 57 Louisiana, Missouri, U. S. A.

EXHIBITORS AT THE NATIONAL APPLE SHOW

Continued from page 28

rado, located on fifteen acres near Okanogan, Washington, two years ago. This is his story:

"I paid $500 an acre and I am so pleased with results in this country that I would not care to put a price on my land. The land was in bearing orchard and I consider I got it at a remarkably low price. The property is irrigated by the government project and will show as good apples as any other section."

W. J. Hart, of the Hunters Valley district, came to the Spokane country from Kingston, Ontario, and bought 320 acres for $4,500. He values the tract at $1,000 an acre.

"I sold five boxes of Winter Bananas for $10 a box and another big lot for $2.50," he said, "and my Wageners, Jonathans and Rome Beauties are bringing me a satisfactory income. I raise some cherries and other fruit. Sixty acres are under irrigation."

H. J. Clark, of Klickitat County, Washington, who took first prize for district displays on nonirrigated lands, came to the Inland Empire from Portland, Oregon.

"I paid $1,700 for 120 acres," he said, "and have been offered $16,000 for eighty

SEEDS, BULBS, PALMS, TREES, SPRAYS AND SPRAY PUMPS, GARDEN SUPPLIES, Etc., Etc.

We are Catering to the Best Class of Buyers. Our Motto—Quality First, Price as Low as We Can Make It.

DESCRIPTIVE CATALOG FREE.

ROUTLEDGE SEED AND FLORAL CO.

169 SECOND STREET,

Between Morrison and Yamhill Streets,

Portland, Oregon.

Apple Seedlings

We have some surplus, both American and French grown
All grades for grafting and budding

Imported Fruit Tree Stocks

Now arriving—Cherry, Pear and Plum stocks—All grades

APPLE GRAFTS

Piece and Whole Root Order quickly

Also a complete line of general nursery stock, mostly in storage

SEND LIST FOR PRICES

WANTED—APPLE SCIONS

Shenandoah Nurseries

D. S. LAKE, Proprietor SHENANDOAH, IOWA

How About Your Trees for Spring Planting?

DO YOU WANT A BUDDED TREE—ONE-YEAR TOP ON A THREE-YEAR-OLD ROOT, OR, ONE-YEAR TOP ON ONE-YEAR PIECE ROOT?

There's a **vast** difference in value to the planter. It's easy to see which of the above trees will be the **best rooted, fastest growing, earliest bearing, most sure to live when transplanted.**

There's no difference in the first cost, but—if you plant a **piece-root** propagated tree, with its inadequate roots, stunted and retarded growth, with no strength or vigor of constitution, ten chances to one fifty per cent of your planting will not survive the first year; whereas, a tree nourished and supported by a root system **three times as strong as itself** can't help but grow, and that rapidly. There's a difference in the cost in the end.

OUR TREES ARE GROWN ON THREE-YEAR-OLD ROOTS. We have a specially nice lot of No. 1 trees in the following:

ARKANSAS BLACK	ROME BEAUTY	BARTLETT PEARS
DELICIOUS	SPITZENBERG	COMICE, ANJOU, Etc.
KING	WAGENER	PEACHES, practically
NEWTOWN PIPPIN	WINESAP	all kinds.

All One-Year Tops on Three-Year Roots

The Best in the Beginning—The Cheapest in the End

You'll find the largest and most profitable orchards throughout the West planted with **Oregon Nursery Company trees.** If in the market for trees, send for our catalogue and submit list of what you want.

ASK FOR INFORMATION. WE'RE AT YOUR SERVICE

OREGON NURSERY COMPANY

Salesmen Wanted ORENCO, OREGON

LAYRITZ NURSERY

Victoria, British Columbia

Headquarters for

CHOICE NURSERY STOCK

in British Columbia

Cox Orange Pippin

The fancy dessert apple of the very highest quality our specialty

GET CATALOG AND PRICE LIST

Loganberry Plants

ALL TIP PLANTS

Will be ready to ship in January

Special prices in large quantities

ASPINWALL BROS.

Brooks, Oregon

YAKIMA VALLEY NURSERY CO.

IT COSTS MORE to produce good trees than poor ones. Anybody can plant them, but it takes constant, painstaking and intelligent care and cultivation to raise and market our class of nursery stock. Catalog on application.

AGENTS WANTED

Yakima Valley Nursery Company

North Yakima, Washington

Nurseries Nob Hill and Wapato, Wash. — *Offices* Clogg Building

THE DALLES NURSERIES

(Successors to R. H. Weber)

GROWERS OF

Choice Fruit and Ornamental Trees, Grape Vines, Small Fruit Plants and Shrubbery

We do not employ Agents, but sell DIRECT to the Planter, making Commercial Orchards a specialty

All correspondence should be addressed to

THE DALLES NURSERIES

122½ Grand Avenue

PORTLAND, OREGON

Remember, our Trees are grown strictly without irrigation

acres of the tract. Commercially, I raise only Newtown Pippins and Spitzenbergs, and sell them for from $3 to $4 a box. I have raised some prize-winning peaches and other fruit and believe this district has the best yet cheapest fruit land in the Northwest."

J. C. Ristau, of Moran Prairie, also a prize winner, came from North Dakota eleven years ago and settled near Spokane. He paid $25 an acre for the raw land and has been offered $1,000 an acre with bearing orchard. He raises Wageners only and some plums and prunes on nonirrigated land.

◈ ◈ ◈

Almost the whole world knows of Hood River as a place that produces the best fruits, and all of Hood River Valley should know, and could know, that there is one place in Hood River, under the firm name of R. B. Bragg & Co., where the people can depend on getting most reliable dry goods, clothing, shoes and groceries at the most reasonable prices that are possible; try it.

Lafayette Nursery Co.

Growers of Standard Sorts and Commercial Varieties

APPLE, PEAR, PEACH, CHERRY, Etc.

Remember, the Root System is one of the most important factors. Ours are unsurpassed.

Regardless of your wants, you cannot afford to place your order until you hear from us. Write today.

Address: LAFAYETTE, OREGON

Mention "Better Fruit"

TREES

Of all sorts, true to name

Magnificent Assortment for Season 1909-1910

Walnuts—We offer all the leading French and American sorts, in grafted and seedling trees.

Grape Vines—All leading types of Table, Raisin and Wine Grapes, on their own roots and grafted on phylloxera-resistant roots.

"California Horticulture"

Contains descriptions of 2,000 varieties of trees and plants; also gives valuable suggestions about planting, pruning and care of orchards. Profusely illustrated. Mailed for 25 cents.

Write us today for quotations on your requirements

BURBANK CREATIONS IN PLUMS AND WALNUTS

We are sole propagators and disseminators of the Santa Rosa, Gaviota, Formosa, Vesuvius Foliage Plums and Rutland Plumcot; Royal and Paradox Rapid Growing Timber Walnuts. Send 25 cts. for beautifully illustrated booklet.

Established 1884 *Paid-up Capital $200,000*

Fancher Creek Nurseries

Incorporated

George C. Roeding, President and Manager

FRESNO, CALIFORNA

GRAPE GROWERS *Attention*

Flame Tokay, Black Cornichon, Black Hamburg, Black Gros Colman, Black Muscat, Muscat, Rose of Peru, Black Ferrara and other fresh, healthy cuttings for delivery this winter.

Prices (reasonable) on application
Order early

A. J. Gallaway Healdsburg, Cal.

420 Acres Devoted to Nursery Purposes

THE WOODBURN NURSERIES

Established 1863 by J. H. Settlemier

Grower of Choice

Nursery Stock

F. W. SETTLEMIER

Woodburn, Oregon

Carlton Nursery Co.

CARLTON, OREGON

Growers of a complete line of nursery stocks. Apples, pears, cherries, prunes, walnuts, plants, etc. Satisfaction guaranteed. We are suppliers of commercial plantings. Before placing your orders be sure and send list of your wants, asking for quotations, as we know we can interest you.

Catalogue upon Application

Quaker Nurseries

We have a large stock of
YELLOW NEWTOWN PIPPINS, SPITZENBERGS, JONATHANS, WAGENERS, ROME BEAUTIES
and all of the leading varieties of apples

We also carry a heavy line of
BARTLETT, COMICE AND BEURRE D'ANJOU PEARS

A general stock of peaches, such as
EARLY CRAWFORDS, ELBERTAS, LATE CRAWFORDS, FOSTERS, MUIR, TUSCAN CLINGS, PHILLIPS, MUIR, EARLY COLUMBIA, *Etc.*

Small fruits in great abundance
STRAWBERRIES, BLACKBERRIES, RASPBERRIES, DEWBERRIES, GOOSEBERRIES, CURRANTS, GRAPES

C. F. LANSING, Salem, Oregon

True-to-Name Nursery

OFFERS TO PLANTERS

Desiring strictly first-class one-year-old trees grown on No. 1 whole roots, a few thousand apple, pear and cherry of the leading varieties adapted to the Pacific Northwest. We make a specialty of growing Yellow Newtown and Spitzenberg and personally select all buds and scions from bearing and tested trees. Order now for fall 1909; get trees guaranteed "true to name," and avoid future disappointment. Address

H. S. GALLIGAN

Hood River, Oregon

Phone Home 2002K *Catalogue on Application*

THE GREATEST APPLE NURSERY IN THE WEST

Some Striking Figures

Above is a glimpse of our very suggestive exhibit at the National Apple Show, Spokane, November, 1909.

While we grow an enormous lot of all the staple fruits, we make a specialty of apples. We had on exhibition one lot each of ten leading varieties, showing the number of trees in each of those varieties in our 1909 plant.

It was hard to convince some visitors that we were already sold out of certain kinds of which we originally had from two to three hundred thousand.

But the list of large orders we had there explained part of the reason why.

And every one of our over one hundred and fifty salesmen could explain some more.

The reason back of it all is our ability to deliver the goods. Come to our nursery at any time, from the time the winter grafting begins in December until the last of the trees are dug in November, and you'll find order, energy, system and careful supervision in every detail.

Our trees don't "happen" to be the best. They're the best because skill, experience, good soil, long growing season and persistent, intelligent cultivation are the factors.

And they're thoroughly ripened before being dug.

Some trees are not—and they suffer.

There's a right way. We've demonstrated that. Our patrons know it.

We're not trying in this ad to create more business for 1909.

It's to let you know that we'll more than double our plant for 1910, and if you're a big buyer we can make it worth your while to contract with us to grow your varieties, so you won't be short, as you were this year.

Drop us a line if interested. Meanwhile, if your present wants are not supplied write us, and if we're out of your varieties we'll tell you so.

WASHINGTON NURSERY COMPANY

Toppenish, Washington

RECLAIMING THE DESERT—STANFIELD GROWS

By Geo. C. Howard, Secretary of the Stanfield Commercial Club

LYING in Northeastern Oregon along the main line of the O. R. & N. Railway and two hundred miles east of Portland, are the plains of Umatilla. These plains are just now passing through the transition period from the days of the bonanza farmer and stock grower, when sixty thousand sheep or five thousand cattle or a five thousand acre wheat ranch represented the holding of one man and the home of one family—from this condition to the change brought by irrigation and by intensive methods of cultivation, under which as much revenue will come from ten acres as was formerly realized from one of these great ranches. This, with its attendant development, the planting of orchards, and the building of towns is, in the fewest possible words, a statement of the reasons underlying the great interest people are showing in this locality.

Even under the crude methods of early days the soil's virgin richness wrought an accumulation of wealth here, till, with an assessed valuation of over $42,000,000, equaling $2,000 for each man, woman or child, or $10,000 for the average family, Umatilla County became literally the richest county in the world.

Geologically, this region is of volcanic formation, successive sheets of lava being overflowed, with a subsequent deposit of volcanic ashes, from ten to one hundred feet in depth. For untold ages after the subsidence of all volcanic activity this basin was a great inland sea, and when the Columbia River finally wore its way through the rocky walls of the Cascades to the sea, and drained these tideless flats, there was left behind a soil which is in itself a better explanation of the riches that followed, than anything which can be written or said.

Giant sage, with bunch grass waist high, was nature's way of covering this newly made earth. Water alone was lacking to turn it into a paradise such as all have dreamed of, though but few have seen.

Among the early settlers and successful farmers of this favored region was W. J. Furnish, of Pendleton. Mr. Furnish was one of the first to realize the possibilities of irrigation, and to set about to bring it to pass. Through his successful management of his great wheat ranches, Mr. Furnish had become that elsewhere rara avis, a millionaire farmer. When the vision of the still greater possibilities of irrigation came to him he acquired an additional ten thousand acres of rich bottom land. Ditches were constructed and the water of the Umatilla River diverted upon the thirsty soil. Later, Dr. Henry Waldo Coe, of Portland, equally as successful in his undertakings, became associated with him, the two becoming jointly responsible for the successful development of the lands in the Furnish-Coe Project and of the great Coe Dam.

There is something exhilirating in an undertaking of this sort. The ambition to do a great thing well, better than it has ever been done before in all the world, is in itself a source of inspiration. It is with the hope of doing it in this wise that everything so far done at Stanfield has been attempted, from the selection of the land to the laying out of the new town. The construction of the ditches, the substantial character of the work on the dam, which has a solid core of concrete sealed to bedrock at bottom and both ends, and thrust up through the center of the earthwork for fifty feet; the care exercised in the leveling of orchard tracts and in the selection of varieties of fruit to put out; and the manner of laying out the new town, with fire limits established and cement sidewalks laid; with building building restrictions which provide for neat and well painted homes, are some of the things which mark the distinctive character of this undertaking.

The work on the ditches was started some two years ago, and the entire area now has an abundance of water available, but the new town has only been started for about three months. There have already been built, however, probably fifty buildings, but the majority of Stanfield's two hundred and fifty people are still living in tents while awaiting material and men to put up their permanent homes. More than a hundred additional lots have been sold with building conditions in the contract, and these, with the other sales made, have exhausted the original plat so that at the end of the town's first three months' existence it has become necessary to plat an addition.

One of the distinctive features in the management of Stanfield's affairs is the semi-monthly excursion, run by the management from the middle western states to the new town. A large number of people come in on each of these excursions, the last one of which may be taken as a fair example of all. On this last car, out of forty-four passengers, every single one either remained in Stanfield, or bought lots in the town or orchard lands near by and returned to bring out their goods and families.

Another indication of the town's rapid growth is found in its school population. Provision made three months ago for fifty pupils, then supposed to be ample for the first year, have already proven inadequate. The enrollment is now seventy-eight, and at an election held November 23, the citizens of the district voted unanimously to issue $10,000 bonds for the erection of the first half of our eight-room school building. This will be begun at once, and on completion, will be provided with full equipment and high school course. The fact that at this election not a single dissenting vote was cast is evidence of the unanimity with which everything affecting the community's interests is met by the enthusiastic citizen.

◈ ◈ ◈

PERHAPS there is no irrigated district in the State of Washington with greater possibilities and opportunities for the man of average means to become successful in the fruit growing business than that in Washtucna Valley. The man of modern means can secure five or ten acres of land in Washtucna Valley at a very reasonable price, and in a few years have an orchard that will be producing an income sufficiently large to keep himself and family in comfort for a long time. One of the problems the poor man has to contend with in owning land in irrigated districts in the West is that of not being able to find work near his home. In Washtucna Valley, the North Coast Railroad has surveyed its line and there will be plenty of work for those who desire it, at good wages, and furthermore, it is rumored that the Palouse Irrigation and Power Company, with offices in Spokane and Seattle, Washington, who are developing many thousand acres of land in the Washtucna Valley, will employ a good many men during the next year.

LET US SEND YOU SAMPLES OR FURNISH ESTIMATES FOR ATTRACTIVE FRUIT CASE LABELS

WRITE Schmidt LITHOGRAPH CO. 408 WELLS FARGO BLDG. PORTLAND, ORE.

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Western Soft Pine. Light, strong and durable.

"Better Fruit" subscribers demand the "Better Box."

CAN MAKE TWO CARLOADS DAILY

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Wholesale Manufacturers

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R. E. HARBISON

WE MAKE THEM OF EVERY DESCRIPTION

Strawberry Crates BOXES

A. L. NEWTON

MADE OF ODORLESS WHITE FIR

The kind that helped to make Hood River famous. Used by the best trade. Write for prices

We make Hood River Apple Box Press, the best on the market

HOOD RIVER BOX CO.

Formerly owned by the Davidson Fruit Company HOOD RIVER, OREGON

ABOUT BOX NAILS

In reply refer to GBK-11/8 Sacramento Cal. Nov 8th, 1906.

A. C. Rulofson Co.,
Monadnock Bldg,
San Francisco, Cal.

Gentlemen:-

The Earl Fruit Company have employed the "Pearson" cement coated wire nail for many years in making up all of its box material, using from 2 to 5 carloads annually. It has not only employed the nail mentioned in that branch of its business where nails are required, but has used the Pearson cement coated nail exclusively, and this because of its many good qualities, chief among which is that it holds more firmly and is therefore more difficult to loosen and pull out than any other nail, which are qualities essential to the making of serviceable and lasting boxes. So far as our experience extends, it is unexcelled.

Yours very truly,

Earl Fruit Company

Geo. B. Katzenstein
Manager

PEARSON'S COATED BOX NAILS EXCEL

Every test proves two facts:
They *do better work* than any other and they are *cheaper to use*

Don't just order "cement coated nails." Always specify and insist on getting

PEARSON'S

and you will get the *right kind.* If you don't order *Pearson's* you take the chance of getting an inferior, short-count brand, paying as much as you do for *Pearson.*

☛ *Remember This:* The *Pearson Brand* stands for quality full count and satisfaction. The kind you saw at the Spokane Apple Show. Our name on every keg. All other brands are imitations, distinctly inferior.

For Sale by all of the Principal Hardware Dealers on the Pacific Coast

MANUFACTURED ONLY BY

J. C. PEARSON CO.
"The Cement Coated Nail People"
BOSTON, MASS.

A. C. RULOFSON CO.
Pacific Coast Sales Agents
315 Monadnock Building
SAN FRANCISCO, CAL.

N. B.—Anyone telling you that other brands are "just as good" does not know or misrepresents the facts

CLAIM THEIR ORCHARD HEATER IS ALL RIGHT

Canon City, Colorado, November 22, 1909.

Better Fruit Publishing Company:

In your November issue we find an article published and headed, "Personal Orchard Heater Experiments," and signed by E. Remy, North Yakima, Washington.

As this is the first article which has ever appeared against the Troutman Heater, we cannot allow publications of this kind written by persons positively inexperienced in this business, to stand and not be corrected. We have studied outside heating, perhaps more than any other concern in the country, and The Troutman Orchard Heater is a result of scientific and practical experiments. They will not go out, and every pot will burn dry, and for seven full hours, and if one does not, it is not the fault of the heater but some foreign cause, either poor oil or ignorance in handling.

In our own orchards last spring we burned thousands of these heaters and not a single pot went out or had to be relighted.

It would naturally follow that a pot that went out several times would produce but little heat; these are the two faults Mr. Remy says were the result of his experiments. One experiment, and only one pot to work with, is positively not a test in any case, and we wish to further add that any Troutman Heaters that are found which go out, as Mr. Remy states, we will gladly replace if it is the fault of the heater itself. We guarantee our goods and will make good any defects which might arise in manufacture.

We do not believe that your subscribers will indorse statements of this kind which are written by people who are not authority in the science of heating, and especially out door and orchard work.

We are anxious for your subscribers to know the exact truth, and that the statements made here will be backed up and guaranteed by this company. We are not knocking other manufacturers, merely defending our own position, which is our right, and which we are only too glad to do. We feel that we understand this business and cannot allow anyone to run down our goods unless he knows more about them than we do ourselves, and as long as we guarantee and make good these statements there surely is not any venture in dealing with us. We have thousands of heaters in use all over the United States, not only in the West, but in the North, South and East, with not one customer who has complained of such difficulties. We can give you the names of growers in Florida, Texas, Missouri and various other states, who will gladly substantiate all of these statements.

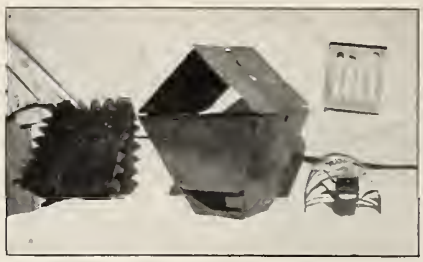
We do not want anything that is not coming to us, but we do look for a square deal and will gladly answer any questions your subscribers see fit to ask.

Kindly publish this letter in your December issue, if this will be possible, as we are sure you are anxious to remedy these errors, since your paper is published for the good of your Northwest growers. We believe we have the cheapest, best, and most economical heater on the market, and will gladly try to convince any responsible authority. Very truly yours,

The Round Crest Orchard Heater Company,
By P. H. Troutman.

COAL COMPARED WITH OIL FOR ORCHARD HEATING

ALL orchard heating tests show that coal will raise the temperature as quickly as oil. The time required to generate gas from oil, to burn and raise the temperature, is offset by the burning waste, kindling and volatile gases of coal. If the difference in cost between coal pots and oil pots required on an acre is used to buy more coal pots to be held in reserve for an exceptionally long night's firing, the difference in cost of labor between firing with coal and with oil is insignificent. A man can well afford to do a little extra work if necessary to keep from handling the greasy, sooty oil. He will also save the $12 per acre necessary to build a cistern and buy a tank wagon. I fired sixteen acres of bearing orchard three nights and saved a full crop of apples, pears and peaches. I used 800 Ideal heaters. My



Buehring's Perfect Orchard Heater

Will save your fruit crop from Jack Frost. Used with absolute success last spring. For a limited time I will offer this combination coal and oil heater, fully protected by letters patent of June 8, 1909, for sale, state rights or entire patent. For particulars address

Frank Buehring, Grand Junct'n, Colo.

Land Plaster, the Great Soil Stimulator

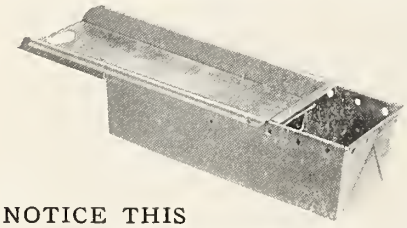
Strengthens and invigorates all soils. You cannot afford to be without it.

OREGON LIME & PLASTER COMPANY

Mill: Lime, Baker County, Oregon Office: Worcester Building, Portland, Oregon

Hamilton Reservoir Orchard Heater

The only heater known that combines simply and perfectly the THREE VITAL FEATURES that make for the most successful and economical outdoor heating.



NOTICE THIS

A simple and positive regulation of the fire by simply drawing the cover. This gives a flow of heat just according to the temperature requirements of the night, and the consumption of oil just in proportion to the amount of fire used. This is the only sensible and economical principle and makes it a small consumer of oil. It couldn't be otherwise. Secondly, A reservoir of oil *not under fire* which admits of an all-night burn with positively no attention required after lighting. This feature makes a uniform fire throughout the period of burning and saves labor as none others can. Thirdly, It gives just the proper combustion for most successful *outdoor* heating. Rochester lamps and oil stoves are intended for indoor heating, and *orchard heaters* have to work under very different conditions. Look into this thoroughly and don't be deceived. It is the simplest in construction, the easiest to operate, and positively the most effective heater known, and these features have all been proven and tried thoroughly in this valley last spring, when more fruit was saved from the frost per heater than any other devices used. We can show you. Draw the cover and the fire does the rest.

Write us for information

HAMILTON RESERVOIR ORCHARD HEATER CO.

Grand Junction, Colorado

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The roofing that always makes good. No matter how big or little the job, Malthoid fits every condition and renders a roof service that is absolutely incomparable. If you want the roofing that is right—demand Malthoid. Made by the original makers of ready roofings.

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expense in placing, operating and taking up the heaters and handling the coal and kindling was close to $40. For kindling, waste, oil, coal house and twenty-five tons of nut coal I paid $110. On the mornings of April 30 and May 2 we fired every other heater for three hours each morning. We lit the fires as fast as we could walk and then gave them no more attention. During the night of April 30 we fired nine hours, using sixteen tons of coal. The temperature outside the orchard fell to 22 degrees above zero, but we held it at 32 and 34 on the inside. The next day four men with two teams refilled the 800 heaters in five hours. One man prepared enough kindling in one day to start 800 fires. By having coal prepared and using team and sled or wagon, the labor of refilling during the exceptionally long nights is reduced to the minimum. To do this work with oil would have required at least 4,000 gallons of oil at a cost of $180, and a cistern and tank wagon at a cost of $190. I consider I have saved $260 the first year.

F. E. Barney.

Gentlemen: This is to certify that I used the Barney (Ideal) coal pot for smudging and have a full crop of fruit to show for it. I used sixty tons of coal in two firings for 1,525 pots. The first night I used seventeen tons for 1,525 pots burning three hours, the second night I used forty-three tons for 1,525 pots burning seven hours. I can highly recommend these pots to any one in the orchard business. Yours truly,

J. J. Silva, Foreman Pomona Orchard.

Mr. Silva used Ideals at the rate of forty to the acre.

O. C. Cook, Palisade, Colorado: I am so well pleased with the Ideal smudge pot, by saving my crop, I thought I would let you know that the pot is a great success in this part of the valley. They far surpass all others that are in the country near by.

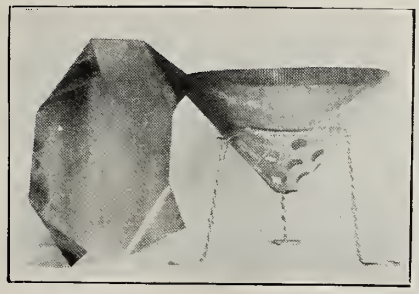
H. J. C. Box, Palisade, Colorado: I have used your orchard heater and find it very satisfactory in every way. It lights easily, burns well and does not require much attention after lighting. I can cheerfully recommend it to any of my brother orchardists as very good.

GRAND VALLEY'S LARGEST FRUIT CROP

(3,000 CARLOADS, VALUED AT $3,000,000)

Was Saved Almost Entirely by Coal. 56,000

IDEAL HEATERS



BURNS EVENLY WITHOUT ATTENTION

Were used, giving entire satisfaction. Coal properly handled and burned in a good heater is the best fuel for orchard heating. One ton of good coal will produce as much heat as 175 gallons of crude oil.

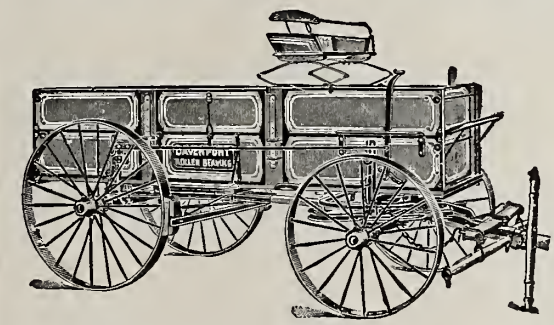
Our best recommend is, that people who have used "Ideals" are buying more. The "Ideal" established its supremacy by one year's use. There are two "Ideals" used in the Grand Valley to one of any other make.

WRITE NOW FOR FURTHER INFORMATION. SAMPLES 75 CENTS, EXPRESS PAID

The Ideal Orchard Heater Company

Agents wanted who can handle Ideals in carload lots GRAND JUNCTION, COLORADO

DO YOU KNOW A WAGON BARGAIN WHEN YOU SEE IT?



You can pay a certain price and get an old style wooden wagon that you and your neighbors have always used.

That will satisfy you as long as you don't know anything better. But, you can pay just about the same price, possibly a little more, and

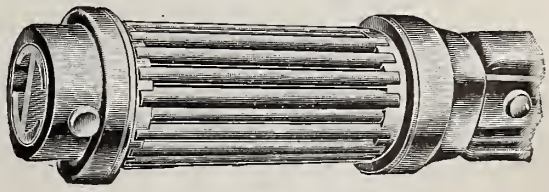
See What You Get for Your Money

Buy this Davenport Wagon and you get a wagon that is practically all steel—a wagon that has double the strength and double the life of your wooden wagon. There are no break-downs, nothing to rot, dry apart or work loose. First cost is the only cost. There are no repair bills. You get the automobile hub with its perfectly protected steel roller bearings. Unlike your wooden wagon, it is impossible for sand, dust, mud or water to enter the bearings. You have the straight instead of the tapering spindle. You oil all four wheels in one half minute. You do it without removing wheels. You get the wagon that is all convenience. You get easy running. You save your horses. Two horses pull as much as three with old style wagons.

THIS ROLLER BEARING MAKES 30 TO 50 PER CENT LIGHTER DRAFT

Which is the better wagon bargain for you? Would you rather have the old style wooden wagon?

Or would you rather pay the same price and get the long-lived, easy-running Davenport Roller Bearing Steel Wagon? Write for Catalog V to give you particulars.



DAVENPORT WAGON CO. Davenport, Iowa

ORCHARD HEATING AND ORCHARD HEATERS

IN VIEW of the great interest being manifested in orchard heating and orchard heaters, and the many experiments or so-called "tests" which various people are making, I believe it will be of interest to your readers and of some value to them to know more about this important subject. Few people realize the great amount of care required to make such a test and obtain accurate results. It is more or less natural that after reading of the wonderful success of orchard heating in the several sections in which it has been done, the orchardist wants to test the matter for himself, as regards the various makes of orchard heaters, before putting his money in any one of them. I say this is natural, but it is also very often detrimental to his own good, for he tries to test with one or two heaters of each kind, and then draws his own conclusions, which are often incorrect and which lead to unnecessary expenditures. In the past two years many such experiments have been carried on; there have been tests with one heater of two different makes, in which the gentleman making the test would come to the conclusion that one was burning longer with a certain amount of oil, and he would try to determine, by holding his hand over the fire, the amount of heat produced. One such test would satisfy him, and he never dreams that a second test might reveal other points that he had not noticed in the first. Others try to get a temperature test with one heater by putting the pot in the center of a ring, with a four-foot wall of canvas. In this way the thermometer is placed on the canvas wall, inside, and another some distance away. By taking the difference in temperature with first one make of heater and then with another, these gentlemen feel that they have made a very fair test and are convinced as to which pot gives the most heat. It is seldom they try putting two pots of the same make in the ring in succession, to see if the amount of heat is the same. Still others try to make such tests by placing a heater inside a closed box car or a tent. These gentlemen have the right principle, but they do not carry it far enough to make it an absolute success, for if they will carry their test on long enough they will find they obtain varied results. Another mode of testing is to place the heaters in an orchard. This is the very best way of testing the merits of the different makes, but even here the bulk of the tests that have been made are not what they should have been. The rules set down for such tests were usually good, but not often carried out.

Now as to how orchard heater tests should be made to obtain accurate results: The first committee ever appointed to look into the merits of orchard heating was at Canon City, Colorado, in May, 1908. The writer was a member of this committee long before he became interested in any one orchard heater. This committee was given $1,000 to carry on experiments with the devices then on the market, and to devise new and better ones if possible. I do not want it to appear that we, the members of this committee, knew it all, for we made the same mistakes that I speak of in the foregoing. It was only after months of hard work that we came to the following conclusions: First, that orchard heating was an unqualified success, and, second, that to make proper tests of orchard heaters we had to proceed carefully, and with almost scientific exactness. Though at first we thought we could take a single heater and get some fair results, and though we made many tests for temperature inside a canvas wall, we found that such tests could not be depended upon. You can take two heaters of the same make, test them in rotation and get different results. If this is possible with two of the same make, it is, of course, natural with two of different makes. I spoke above of the test made in a closed box car as being nearest to the right principle in making a temperature test with one heater. There is a way to make such a test; that of placing a heater in a closed room, with an aperture for incoming cold air and another for outgoing hot air, and with delicate instruments and thermometers to record the volume and temperature of the incoming air and also the volume and temperature of the outgoing air. This test, if carried on by some one who is thoroughly qualified, will give accurate results. I might say in passing that this test is such a scientific one that I have never attempted to make it myself.

In testing coal for boilers the evaporation of water is used as a test, and it is carried on very successfully. I have made such tests with orchard heaters, in the open air however, and though the results were very interesting and helpful, I would not recommend such a test unless conducted by an engineer who understood the principles of the matter, and unless carried on indoors, for no such test in the open air can be depended upon absolutely.

For practical work the only way to make a test that is at all satisfactory is to make the test in an orchard. I believe if such a test is carried on in

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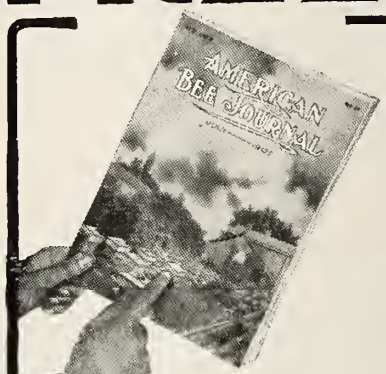

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Chicago, Illinois

National Irrigation Journal

GOLDEN OPPORTUNITIES IN THE GOLDEN WEST

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NATIONAL IRRIGATION JOURNAL 120 Sherman Street, Chicago

All Fruit Growers

Make
Their Headquarters
at

The Portland

H. L. Bowers Manager Portland, Oregon

a careful manner, with the following rules absolutely adhered to, the results will be substantially accurate. First, select an orchard where there is at least five acres exactly alike, as to the number of trees to the acre, age of trees, etc.; second, give each kind of a heater one acre of ground to heat; third, see that the blocks of heaters are not within 200 feet of each other, to prevent any possibility of one block affecting the other; fourth, give each block of heaters one hundred gallons of oil and fill each heater with the same quantity of oil: fifth, place the number of pots to the acre that is recommended by the manufacturer; sixth, place the heaters at equal distances over the acre; seventh, continue the test for six hours; eighth, use nothing but government, or government registered, thermometers, and see that all are compared to each other; ninth, use at least three thermometers in each block; tenth, place one thermometer in the very center of the center square of heaters in each block. Place the other two thermometers wherever desired, but be sure they are in the center of the square of heaters each occupies, and be sure the thermometers are hung in the corresponding square in each block of heaters. See that the thermometers are hung the same distance above the ground in each case; eleventh, take temperature readings at least once every half hour: twelfth, measure any oil that may be left over after the six hours' burning; thirteenth, make the test on a still night. A repetition of the test may be advisable on another night. Let the result of the test be the average temperature during the six-hour period and the amount of oil consumed. In placing your outside thermometers have two or three placed on different sides of the heated block, and not closer than 200 feet from any heated block.

Our committee found that to get accurate results the above rules had to be adhered to.

It will be seen very clearly that if such care is necessary to arrive at the truth, how absolutely impossible it is for any one to make a test of one or two heaters, out in the open, and then to state to the public that certain things are correct. If you want merely to see how long a heater will burn with a gallon of oil you can test with one heater, but don't make only one test, but seven or eight, then take the average, for when burning in the open the wind has a considerable effect upon the length of time a certain heater will burn, and the wind sometimes has a different effect on one device than it has upon another, hence an average number of burnings must be taken.

P. H. Troutman, Vice President
The Round Crest Orchard Heater Company.
Canon City, Colorado.

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ABOUT THE CODLING MOTH

STATE COLLEGE OF WASHINGTON
Pullman, Washington, December 8, 1909.

We are anxious to discover what success the apple grower has had this year in fighting the codling moth. It seems that the season 1909 has been unusually "wormy." If you will kindly fill out as many as possible of the questions below, giving your experience, the favor will be greatly appreciated. A. L. Melander, Entomologist.

Name of grower: location of orchard; number of acres; age of trees; number of trees sprayed; main varieties; is orchard irrigated; what brand of lead used: what strength of spray; about how many gallons were applied to a tree; how many sprayings given, (a) at end of blossoming, (b) one to two weeks later, (c) two to four weeks after blossoming. (d) in July, (e) in August, (f) in September; what make and style of pump was used; at what pressure was the spraying done; what kind of nozzles were used; how many leads of hose; how many nozzles to a lead of hose; how long hose; was a "crook" used; was a "tower" used; about how many boxes of fruit did each tree yield; what per cent of loss was occasioned by worms; what per cent of wormy apples were infested at the blossom end; was your success better or worse than your nighbors'; was your success better or morse than last year; how do you explain it; how do you intend to spray next year?

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HOOD RIVER, OREGON

Buy and Try

WHITE RIVER FLOUR

MAKES

WHITER, LIGHTER BREAD

The Hood River Electric Light, Power & Water Co.

DOING A GENERAL ELECTRIC LIGHT AND POWER BUSINESS

TWENTY-FOUR HOUR SERVICE

City Water Works System for Domestic and Municipal Use. Are prepared to furnish 3,000 horsepower, either Electric or Water, at Reasonable Rates

General Office, HOOD RIVER, OREGON

"STANDARD BOX" AS PROPOSED IN PORTER BILL

"WHEREAS, The method of marketing apples in boxes originated on the Pacific Coast, and the box is the only package used on this coast for packing apples for market, and the dimensions of the boxes used here are well and favorably known to all buyers and users of apples of the highest grade, and by agreement with transportation companies, are accepted for transportation at the uniform weight of fifty pounds per box, regardless of actual weighing, which is a matter of great convenience to all shippers of apples in boxes; and,

"Whereas, The apple boxes in use here are those established by the Northwest Fruit Growers' Association, representing the apple raisers of the whole Pacific Northwest, and in particular those of Oregon, Washington, Idaho and Utah, and are known as the 'standard' box, which contains, without allowance for the bulging, 2,173 cubic inches, and the 'special' box, which contains, without allowance for the bulging, 2,200 cubic inches, or in both cases materially more than the cubic contents of a Winchester bushel, viz: 2,150.4 cubic inches, and the fruit trade everywhere is familiar with these boxes; knows their contents and what size of apples to expect when ordering boxes of three-tier, four-tier or a four and a half tier, as the case may be; and

"Whereas, A bill was introduced in Congress at its last session, known as the Porter bill, which bill is now pending, and which provides that a 'standard box' of apples must contain 2,564 cubic inches, or a suppositious 'heaping bushel,' although no box of such dimensions is now known to the trade, and provides further that any box of apples which contains less than 2,564 cubic inches must be marked, both on the sides and on the top, with letters not less than one inch long, 'short box'; be it

"Resolved, By the Northwest Fruit Growers' Association, that the dimensions prescribed by law for a 'standard' box of apples should conform to those established by long usage and the formal action of fruit growers of this coast, and should not be so changed as to compel the growers and packers of apples on this coast to suffer vast losses which would inevitably result in changing to a much larger box, with which no one would be familiar, and which would require everyone who handles box fruit to adjust himself to new and unknown changes of sizes, styles of packing and freight charges, all of which losses would necessarily fall upon the producers of the apples, either directly or indirectly; and be it further

"Resolved, That this association hereby requests the senators and representatives in Congress from Oregon, Washington, Idaho and Utah, to have the said Porter bill so amended as to provide that the cubic contents of a standard apple box shall be defined as one 'containing not less than 2,150.4 cubic inches,' or the amount contained in a Winchester bushel."

This resolution was unanimously adopted by the association.

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It was refreshing to note the fruit growers' indorsement and defense of the apple box, now in use on the Pacific Coast, in the February issue, as very few people in the barrel section of the country seem to appreciate the merits or demerits in the case. The friends, in general, of the Porter box regulations are either densely ignorant on the subject, or they are imbued with a spirit of gross unfairness and "big stick" presumption.

The apple box now in general use on the Pacific Coast, is the product of evolution, the survival of the fittest, and now a necessity. It has come to be just what it is, developed through long experience, to meet all requirements as they were found to exist; and strange to say, happens to hold, when properly packed, over one Porter bushel; i. e., fully one-third of a Porter barrel, as was demonstrated to the delegation which recently met in Washington to have it proscribed, and which can be demonstrated any time. Before packing, the Northwest standard box holds 2,173 cubic inches, the "special" 2,200; when packed a heap is added for bulge, from one to two inches high and making from 200 to 300 cubic inches; and in addition to this, these boxes are solid layer packed, so that it requires just about 2,700 cubic inches of loose apples to fill a box.

It is remarkable that the promoters of the Porter bill should be ignorant of the above facts; they seem to be aware of the bulge in the barrel, but not in the box; they seem to believe that a jumble filled box or basket will hold the same as one where the fruit has been built in solid rows and layers; at least they make no allowance for a difference. It should be known that a box can not be moved with a large enough heap on so there will be enough apples to pack the same.

They propose to establish by law, three grades of apples, that in no sense will or can apply to the grades now established on the Pacific Coast, or even to any grades that can be made in well

"ORWOOD" FRUIT SPRAY

A spray made entirely from wood oils and wood acids.
A spray that is a positive fungicide.
A spray that is positively fatal to all scale and aphis.

"Orwood" fruit spray is the most efficient winter spray for mosses, fungus, San Jose and other scale and all pests requiring winter spraying.

For summer spraying for fungus, scab, scale and all the forms of aphis, "Orwood" spray is unequaled. No fungus can germinate or live where it is used, and it is fatal to all the sap-sucking pests. It will not spot foliage or fruit.

For borers, paint the tree trunks with "Orwood" spray at its full strength.

Paint your poultry house with "Orwood" spray at its full strength and eradicate all insect pests.

If your dealer does not carry these articles write

OREGON WOOD DISTILLING COMPANY

Works at Linnton, Oregon

418 Mohawk Building PORTLAND, OREGON

To Destroy Aphis and Plant Lice Without Injury to Foliage, Use

"BLACK LEAF" TOBACCO EXTRACT

A FEW TESTIMONIALS FROM EXPERTS YOU PROBABLY KNOW

PROF. C. P. GILLETTE, of the Colorado Experiment Station: "We used 'Black Leaf' Extract to a considerable extent in our experiments in the vicinity of Grand Junction, Colorado, the past summer, and found it very satisfactory indeed, both for the destruction of woolly aphis and the green aphis of the apple tree. We also used it against the black peach aphis and the green peach aphis with equally good results. So far as I am able to learn, universal satisfaction was given wherever the decoction was used as strong as one part in seventy-five parts of water."

MR. LUTHER BURBANK, Santa Rosa, California: "I have found 'Black Leaf' Tobacco Extract convenient and satisfactory for destroying aphis and other insects."

DELTA COUNTY FRUIT GROWERS' ASSOCIATION, Delta, Colorado: "'Black Leaf' is the best remedy we have ever found for plant lice on fruit trees, as it not only cleans up the pests, but seems to invigorate and tone up the trees when it is applied to them while the foliage is on."

MR. A. N. JUDD, Watsonville, California: "For all plant lice, and green or black aphis, 'Black Leaf' Tobacco Extract is the most gratifying of all washes."

HOOD RIVER APPLE GROWERS' UNION, Hood River, Oregon: "We are satisfied 'Black Leaf' is going to take the place of all other aphis sprays in this section."

ROGUE RIVER FRUIT GROWERS' UNION, Medford, Oregon: "'Black Leaf' does not burn nor injure the foliage or the fruit, and will eradicate aphis immediately."

PRICE: In 5-gallon jacket cans, 85 cents per gallon, f.o.b. Louisville, Kentucky, or in the Central states; the average Western price being 95 cents per gallon. In 1-gallon cans the price is $1.00 each, f.o.b. Louisville, Kentucky, and at most points east of Omaha.

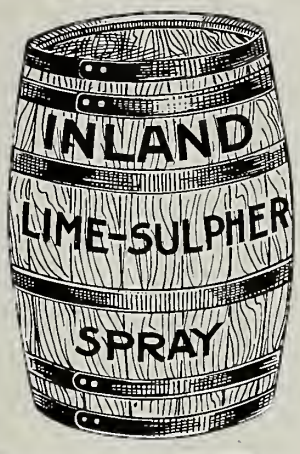
DILUTION: For spraying fruit trees, 1 gallon of "Black Leaf" is usually diluted with 70 gallons of water.

UNIFORM STRENGTH: Owing to the fact that "Black Leaf" is permitted by the United States Department of Agriculture to be used in official dipping of sheep and cattle, "Black Leaf" is marketed under a positive guarantee as to nicotine strength. This feature will doubtless be duly appreciated by fruit growers.

MANUFACTURED BY THE

KENTUCKY TOBACCO PRODUCT CO.

(INCORPORATED) LOUISVILLE, KENTUCKY



THE C. G. BETTS CO.

INLAND BRAND

Lime-Sulphur Bordeaux Sulphur Arsenate of Lead
Creoseptic Bluestone
Flume Cement Arsenate of Soda Lead Asetate

Our goods are made to comply with government requirements

SPOKANE, WASHINGTON

graded box pack. The average for the two boxes in common use here, as concerning our two lowest grades, the four and a half and five-tier sizes would probably come under the "A" and "B" Porter grades, but the four, three and a half and three-tiers would have to be designated one, two and three letters ahead of "A," for which the sages of the said bill have failed to make any provision.

On top of the above discussed points of unreasonable demands, they also, in sheer disregard for our feelings and in defiance of all reason, and without any justification, propose to dictate the shape of the box as well.

In view of the above, it can hardly be said that the promoters of the Porter bill are impartial and competent enough to warrant the public in letting them meddle with their neighbors' business. It would be preposterous to enact such a law. We wonder if anyone of its many friends have ever contemplated the enormous army of inspectors it would require to enforce such a law in regard to the grades and grading. Just pause for a moment and note what it means, for instance: A buys fifty carloads of apples from B, and when they arrive he refuses them, claiming that they are not up to the "A" grade, as they were shipped to be. The shipper contends they are; a force of one hundred government inspectors is called in to pass on the grade; they go to work counting, measuring and inspecting every apple, and in the course of three or four weeks they may be able to announce whether the lot is 89 or 91 per cent up to grade. Why! It would require a hundred thousand inspectors to cover the markets and packing places of the United States. Why not regulate about every other kind of fruit, every kind of vegetable, cereal, etc., in the same manner, and all get positions as inspectors?

Karl J. Stackland.

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SCHMIDT LITHOGRAPH COMPANY
Lithographers, Color Printers
Labels, Cartons, Display Cards

Portland, Oregon, December 16, 1909.

Better Fruit Publishing Company:

Gentlemen: We enclose you herewith an inquiry received through "Better Fruit" from the Canal Zone, Central America, as we believe you will be interested in noting the extent to which advertising in "Better Fruit" has given us publicity.

We are frank to state that we know of no better advertising medium by means of which to reach the fruit grower than through the columns of your periodical, and believe in expressing our appreciation in instances of this kind.

With compliments incident to the season, we are

Very truly yours,
Schmidt Lithograph Company.
H. W. J.

Balboa, Canal Zone, November 23, 1909.

E. S. Morgan, Northwestern Manager, Portland, Oregon.

Dear Sir: Kindly send me samples (with prices) of apple labels. Will be marketing the output of a one hundred-acre Oregon orchard in the course of three years, and will consequently use a considerable quantity of labels. Kindly send me as complete a line of samples as you can conveniently. Also please advise if you handle cardboard fillers for fruit packing. If not, can you give me the names and addresses of some concerns that sell this line of goods?

Thanking you in anticipation for your attention, I am, Very truly yours,

D. V. Stratton.

(Advertisement in "Better Fruit.")

SPRAY WITH THE OLD RELIABLE BRAND

SWIFT'S

ARSENATE OF LEAD

Manufactured only by the

MERRIMAC CHEMICAL CO., Boston, Massachusetts

WOODARD-CLARKE CO., Portland, Oregon

Hemingway's

ARSENATE OF LEAD

A Perfect Product
Properly Packed
Honestly Priced

Guaranteed to meet the requirements of the various State Agricultural Authorities

For Coast Prices and Supplies
Address the Agents

KERR, GIFFORD & CO.
Portland, Oregon

MOST OF THE WINNING WILLAMETTE VALLEY APPLES AT THE PORTLAND SHOW WERE SPRAYED WITH

Dependable Brand Lime and Sulphur Solution

OUR SPRAY DOES THE WORK WELL, THAT'S THE REASON

Manufactured by

GIDEON STOLZ COMPANY

Write for Our Spray Manual and Prices SALEM, OREGON

UNIFORM GRADING OF APPLES FOR NORTHWEST

WESTERN apples will be packed in three grades in the future, these being named "Extra Fancy," "Choice," and "Orchard Run." The purpose is to protect the buyers and consumers, help the growers and promote the industry.

This was decided at a meeting of two hundred growers, representing every commercial district in the Northwest, in the Washington State Armory in Spokane, on November 17. E. T. Balch, representing the Wenatchee District, was chairman of the committee on rules, the other members being C. H. Sproat, Hood River District; C. E. Whistler, Southern Oregon District; J. L. Dumas, president of the Washington State Horticultural Association, Walla Walla District, and H. M. Gilbert, Yakima Valley District. The following resolution was adopted:

Whereas, It is clearly apparent that the boxed apple growers of the Pacific Northwest should work together to mutual advantage for our rapidly increasing industry; and

Whereas, There is great confusion in the naming of the grades in the different districts, mystifying the buyers, shippers and consumers, greatly to the disadvantage of the industry; therefore, be it

Resolved, That we, the undersigned committee representing the exhibitors, apple growers, and apple shippers of the Pacific Northwest, recommend to our various districts:

First: That our apples be packed in three grades.

Second: That said grades be named "Extra Fancy," "Choice," and "Orchard Run."

Third: That where the words "Extra Fancy" are stamped on the box, it shall signify that the apples when packed were sound, uniformly graded, as to size in each box, smooth, practically free from bruises, worms, worm stings or disease, and have reasonably proper shape for the variety, fully matured. All red varieties in this grade shall be at least 50 per cent red, except Spitzenberg, Winesap, Jonathan and Arkansas Black, which shall be at least 70 per cent red. Yellow Newtowns, White Winter Pearmains, Grimes' Golden, Bellflower, Ortleys' Winter Bananas and Red Cheek Pippins will be allowed in this grade.

Fourth: The "Choice" grade shall consist of apples sound, uniformly graded as to size in each box, free from any breaks in the skin or black bruises, also free from worms or any disease which materially injures the quality of the apple.

Fifth: Where for any reason the grower or packer does not desire to use the "Extra Fancy" or "Choice" grades, we recommend the varieties be packed in one grade, termed "Orchard Run." The apples in this grade shall be practically free from worms, or any disease which materially injures the quality of the apple, and shall not be smaller than five-tier, nor less than two inches in diameter.

It was also decided to publish the rules in pamphlet form for distribution to growers, packers and buyers.

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A GREAT BOOK FREE

GREAT Crops of Strawberries and How to Grow Them, for 1910, has reached our desk. This annual edition sent out by R. M. Kellogg Company, of Three Rivers, Michigan, has come to be a standard work of highest value to strawberry growers, and the number now before us excels in this respect, if possible, any previous issue. Typographically, it is the most beautiful edition this great company ever has sent out, and its illustrations are of unusual beauty and suggestiveness. None may see these illustrations and read of the results secured by growers without appreciating the wonderful quality of the Kellogg plants.

We know of no better evidence of the advance of intensive horticulture and the growth in popularity of the strawberry than is afforded by the expansion which has taken place in this company's business during the last few years.

However, we wish every reader of this journal to take advantage of the offer of a free copy of this invaluable book. Address

R. M. Kellogg Company,
Box No. 355, Three Rivers, Michigan.

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ONE of the most remarkable transactions in the apple trade has taken place quite recently. Ten half barrels of Cox's Orange Pippins from Nova Scotia realized £20 wholesale, which is at the rate of eighty shillings a full sized barrel. Roughly speaking, this is equal to 26s 8d per bushel.—London Daily Telegraph.

This, reduced to dollars, gives $6.50 a box. We understand that considerable planting of this variety of apple is now being made in the Kootenay country of Western Canada, where this variety seems to reach great perfection, the first and second prizes in the plate fruit exhibit at the National Apple Show being carried off by exhibitors from Kootenay Lake.

LILLY'S BEST SPRAY BOOK

MOST complete addition of its kind ever published on the Pacific Coast. Contains a Spray Calendar compiled by the State Experiment Station--Illustrations, Descriptions and Habits of Insects and Diseases peculiar to plants and fruits of the Pacific Coast—Spray Machinery, and how to use it—and a list of tested Sprays and Insecticides. It is A PRACTICAL GUIDE, and will be sent free to anyone interested.

The CHAS. H. LILLY CO., Seattle

Insure Against Scale By Spraying

The best insurance against the San Jose Scale that you can take out for your orchards during the winter months is to spray them *now* while they are dormant. It is pretty well established that the scale gets in much of its deadly work during the winter, feeding on the stored up energy of the tree. The only sure way to avoid the chance that they are feeding on your trees during the cold weather is to spray now with some reliable material.

SHERWIN-WILLIAMS LIME-SULFUR SOLUTION

means insurance for your orchards during the next three or four months. If you spray your fruit trees at this time you can be sure that they will go through the winter free from the attacks of the scale or any fungus diseases. Then when the spring arrives, they will be in a healthy condition and in all probability will need little if any further spraying for scale, unless their present condition is unusually bad.

Write our nearest office for particulars regarding prices and shipment.

THE SHERWIN-WILLIAMS CO.

MANUFACTURERS HIGHEST GRADE INSECTICIDES AND FUNGICIDES

FACTORIES: CLEVELAND, CHICAGO, NEWARK, MONTREAL, LONDON, ENG.

SALES OFFICES AND WAREHOUSES IN PRINCIPAL CITIES 739

"LION BRAND" TRADE MARK Spraying Materials

LION BRAND

Is the stamp of purity, strength and uniformity in insecticides

We make more insecticides than any other manufacturer in the United States, and Blanchard's "LION BRAND" is the standard on four continents.

BLANCHARD'S
LION BRAND BORDEAUX MIXTURE

Made by us for over twenty years, and guaranteed to contain nothing but the purest and most effective ingredients. One gallon to forty-nine of water.

BLANCHARD'S
LION BRAND PARIS GREEN

We are the only independent makers of Paris Green. Lion Brand is sold in every state in the Union. There's a reason—Lion Brand is pure and strong, contains not a particle of filler or adulterant, nothing but purest Paris Green.

BLANCHARD'S
LION BRAND ARSENATE OF LEAD

Unequaled by any, anywhere, at any price. The Lion Brand is backed for purity and strength by our manufacturing reputation of nearly a quarter of a century.

LION BRAND

Insecticides are on sale in every state. If you cannot get them handily, write directly to us and we will see that you do. Send for

Blanchard's Spraying Booklet

It is free to any one who is interested and contains much invaluable information for the fruit grower and trucker.

The James A. Blanchard Co.
621 Hudson Terminal Building
New York City, New York

PORTLAND SEED CO.
Local Agents PORTLAND, OREGON

Medford Spray Co.
MEDFORD

Oregon Spray Co.
PORTLAND

Hood River Spray Mfg. Co.
HOOD RIVER

These Factories Make and Distribute the Famous

NIAGARA
Lime-Sulphur Spray

The leading fruit growers and fruit growers' associations of the Northwest use NIAGARA exclusively

There is a Reason Why

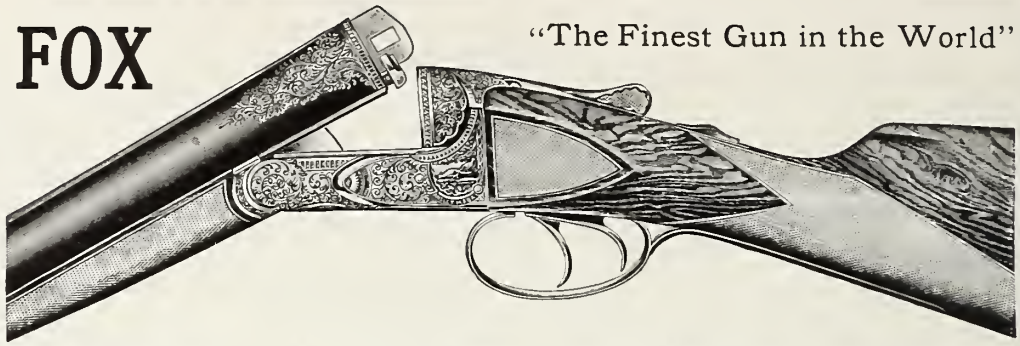
NIAGARA is made under special process originated by ourselves. The only known process by which is made a permanent, clear and reliable solution of lime and sulphur of sufficient strength to meet all requirements

Write for Further Information

Wherever Fruit Excels NIAGARA SPRAY ***is Used***

THE A. H. FOX

"The Finest Gun in the World"



The **genuine Ansley H. Fox** double barrel hammerless gun is the gun that has such few parts, hence its strength, as these parts are made much stronger where other gun parts are weak.

All **A. H. Fox Guns** have **Krupp fluid** steel barrels. All **A. H. Fox Guns** are liberally guaranteed. Made in 12-gauge only, and in five grades. For sale by all progressive dealers and jobbers on the Pacific Coast and by

THE A. H. FOX GUN CO. 4682 North Eighteenth Street, **Philadelphia, Pa.**

Read Colonel Roosevelt's Comment on Fox Guns in October Scribner's

ATTRACTIVE EXHIBIT

THE visitors to the National Apple Show, held at Spokane in November, no doubt will remember the very attractive display made by the J. C. Pearson Company, of Boston, Massachusetts ("The Cement Coated Nail People"). They had a booth in Machinery Hall, in charge of their Pacific Coast sales agents, A. C. Rulofson Company, of San Francisco, and had practical box-makers driving and pulling all kinds of wire box nails, demonstrating the superiority of the Pearson Coated Nail.

We are informed that a very large majority of the fruit packers of the Northwest, also of British Columbia, are using the Pearson product, and find it very satisfactory. At the same time, it is surprising that some packers who are generally very well informed, were using old-style, smooth or barbed box nails. It is inconceivable that they would continue to do so in face of the convincing evidence as to the superiority of the Pearson Coated Nail, presented at the apple show.

A superintendent of one of the largest apple packing houses in the Northwest was overheard to say at the Pearson booth: "Our experience teaches us that they drive easier, and hold a great deal tighter, go farther and cost less than any other; at the same time, being slimmer than smooth or barbed box nails, and being well pointed, they do not split the box. They are equally good in pine and spruce boxes."

Some parties complained that they had been imposed upon when they ordered "Cement Coated Nails," by the substitution of imitation brands that proved very unsatisfactory, the heads being too small, the nails being poorly pointed, and instead of a good cement coating, they were covered with a worthless "dope."

It, therefore, would be well for our readers to take heed of the Pearson Company's advertisement appearing on another page, and remember that when ordering they should always specify *Pearson's* Cement Coated Nails, to insure getting the kind they saw at the apple show. Otherwise, they may be imposed upon by the substitution of a worthless imitation, being sold on Pearson's reputation, and represented as "just as good." Imitations of all kinds are admittedly inferior, and nails are no exception to this rule.

The Pearson Company are to be commended for their enterprise in making the exhibit that they did, and for their enterprise in coming so far to help "boost" the apple show. "Better Fruit" wishes them every success, which no doubt awaits them, as they deserve it.

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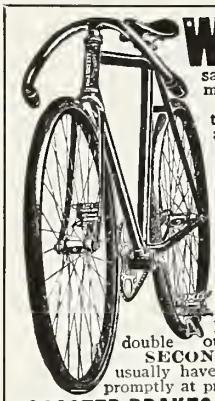
Dayton, Oregon, November 15, 1909.

Gideon Stoltz Company, Salem, Oregon.

Gentlemen: I used the Dependable Lime and Sulphur Solution manufactured by you and find by giving its results my personal attention that it is safe and reliable. I sprayed just before the buds opened in spring, three per cent strength, and then added one gallon full strength to every fifty gallons of the lead spray I used for moth during the summer. I find I have the cleanest crop I have ever harvested. I am satisfied by using as above stated it will hold the scab in check, kill all scale and is of great value as a summer spray. I only used one and one-quarter pounds of lead to fifty gallons of water with good success, and enough of the lime and sulphur remains on the trees in the fall to help hold anthracnose in check.

Yours respectfully,

D. C. Van Dorn.



WANTED--A RIDER AGENT IN EACH TOWN and district to ride and exhibit a sample Latest Model **"Ranger"** bicycle furnished by us. Our agents everywhere are making money fast. *Write for full particulars and special offer at once.*

NO MONEY REQUIRED until you receive and approve of your bicycle. We ship to anyone, anywhere in the U. S. *without a cent deposit* in advance, *prepay freight*, and allow **TEN DAYS' FREE TRIAL** during which time you may ride the bicycle and put it to any test you wish. If you are then not perfectly satisfied or do not wish to keep the bicycle ship it back to us at our expense and *you will not be out one cent.*

FACTORY PRICES We furnish the highest grade bicycles it is possible to make at one small profit above actual factory cost. You save $10 to $25 middlemen's profits by buying direct of us and have the manufacturer's guarantee behind your bicycle. **DO NOT BUY** a bicycle or a pair of tires from *anyone* at *any price* until you receive our catalogues and learn our unheard of *factory prices* and *remarkable special offers* to **rider agents.**

YOU WILL BE ASTONISHED when you receive our beautiful catalogue and study our superb models at the *wonderfully low prices* we can make you this year. We sell the highest grade bicycles for less money than any other factory. We are satisfied with $1.00 profit above factory cost.

BICYCLE DEALERS, you can sell our bicycles under your own name plate at double our prices. Orders filled the day received.

SECOND HAND BICYCLES. We do not regularly handle second hand bicycles, but usually have a number on hand taken in trade by our Chicago retail stores. These we clear out promptly at prices ranging from **$3** to **$8** or **$10.** Descriptive bargain lists mailed free.

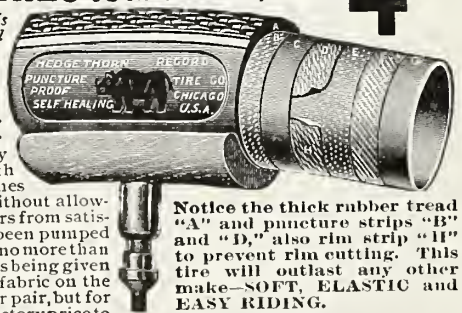
COASTER-BRAKES, **single wheels, imported roller chains** and **pedals,** parts, repairs and equipment of all kinds at *half the usual retail prices.*

$8.50 HEDGETHORN PUNCTURE-PROOF SELF-HEALING TIRES *A SAMPLE PAIR TO INTRODUCE, ONLY* **$4.80**

The regular retail price of these tires is $8.50 per pair, but to introduce we will sell you a sample pair for $4.80 (cash with order $4.55).

NO MORE TROUBLE FROM PUNCTURES

NAILS, Tacks or Glass will not let the air out. Sixty thousand pairs sold last year. Over two hundred thousand pairs now in use.



Notice the thick rubber tread "A" and puncture strips "B" and "D," also rim strip "H" to prevent rim cutting. This tire will outlast any other make—SOFT, ELASTIC and EASY RIDING.

DESCRIPTION: Made in all sizes. It is lively and easy riding, very durable and lined inside with a special quality of rubber, which never becomes porous and which closes up small punctures without allowing the air to escape. We have hundreds of letters from satisfied customers stating that their tires have only been pumped up once or twice in a whole season. They weigh no more than an ordinary tire, the puncture resisting qualities being given by several layers of thin, specially prepared fabric on the tread. The regular price of these tires is $8.50 per pair, but for advertising purposes we are making a special factory price to the rider of only $4.80 per pair. All orders shipped same day letter is received. We ship C. O. D. on approval. You do not pay a cent until you have examined and found them strictly as represented.

We will allow a **cash discount** of 5 per cent (thereby making the price **$4.55** per pair) if you send **FULL CASH WITH ORDER** and enclose this advertisement. You run no risk in sending us an order as the tires may be returned at **OUR** expense if for any reason they are not satisfactory on examination. We are perfectly reliable and money sent to us is as safe as in a bank. If you order a pair of these tires, you will find that they will ride easier, run faster, wear better, last longer and look finer than any tire you have ever used or seen at any price. We know that you will be so well pleased that when you want a bicycle you will give us your order. We want you to send us a trial order at once, hence this remarkable tire offer.

IF YOU NEED TIRES don't buy any kind at any price until you send for a pair of Hedgethorn Puncture-Proof tires on approval and trial at the special introductory price quoted above; or write for our big Tire and Sundry Catalogue which describes and quotes all makes and kinds of tires at about half the usual prices.

DO NOT WAIT but write us a postal today. **DO NOT THINK OF BUYING** a bicycle or a pair of tires from anyone until you know the new and wonderful offers we are making. It only costs a postal to learn everything. Write it **NOW.**

J. L. MEAD CYCLE COMPANY, CHICAGO, ILL.

WONDER OIL LAMP FREE

This is a Genuine offer to lamp users, made to introduce the Wonder **INCANDESCENT 100 CANDLE POWER** Kerosene Oil Lamp in every locality. Many times **BRIGHTER CHEAPER** and **SAFER** than Gasoline, Electricity or ordinary lamps for lighting homes, offices, stores, halls and churches. We ask that you show it to your neighbors. If you accept this proposition we will send you we will give you a lamp **FREE.** Send your name and name of your nearest express office.

UNITED FACTORIES CO.
Largest Lamp House in America.
1072 FACTORY BLDG., KANSAS CITY, MO.

FINE BABY CHICKS

8 CENTS EACH

Leghorns, Wyandottes, R. I. Reds, Minorcas, Langshans, Orpingtons, Plymouth Rocks, etc. All fine stock. Partly grown chicks, 30 cents each. Eggs for hatching, $4.00 per 100. We guarantee safe arrival anywhere. Booklet free.

CULVER POULTRY FARM
121 Broadway Benson, Nebraska, U. S. A.

Salem Tile Factory

GOLD MEDAL

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EXHIBITS AT NATIONAL APPLE SHOW, SPOKANE

SPRAYING OUTFITS and power sprayers exhibited at the National Apple Show, Spokane. The National Apple Show was a success, and its importance to the apple industry cannot be overestimated. To our surprise, publicity has been devoted to the apple display alone in every periodical that has come under our eye, and other important exhibits entirely overlooked. The other displays are very important from an educational standpoint, and it is our purpose in this issue not only to mention them, but to commend and thank the exhibitors on behalf of the fruit growers. The magnificence and beauty of the apple display is well covered in another part of this edition and profusely illustrated, but all this could not be if it were not for the spraying outfit. While we admit that the spraying outfit exhibits were for business purposes, still we claim that the growers are indebted to the exhibitors for the opportunity of examining them and for the explanations and demonstrations given. The grower was given an opportunity to investigate most of the best known power outfits without extra expense, and moreover he had a splendid opportunity for comparing one with another and drawing his own conclusions and then talking it over with other fruit growers. This chance was made possible by the National Apple Show and the courtesy and generosity of sprayer manufacturers. It was one of the most important educational features of the National Apple Show. Nearly all the well known and generally approved power sprayers were on exhibition. Below is given a list, but we beg to say the order of mention is at random, without any view to popularity or preference of one over another: Hardie Manufacturing Company, Portland, Oregon, factory at Hudson, Michigan; Bean Spray Company, San Jose, California; International Harvester Company, Chicago, Illinois; Deming & Co., Salem, Ohio; American Sprayer Company, Minneapolis, Minnesota. Circulars, price lists, etc., will be furnished free upon request.

◈ ◈ ◈

WEBER & JOHNSTONE, The Dalles, Oregon, placed on exhibition the Kimball harrow, which has rapidly won its way to the front rank as the perfection of orchard cultivators or harrows, both as a weeder and dust mulcher. When a grower once uses a Kimball he becomes an advocate. There is something peculiar about the fruit grower in this respect. When he finds a good thing he tells his fellow fruit growers about it. The Kimballs are made in three regular widths, one with a cut out middle. They can be ordered in any width, so that a certain number of laps will cultivate the entire space between your trees, whatever may be the distance. Mr. Weber was on hand at the National Apple Show to explain in his genial way the many advantages of the Kimball, and the firm of Weber & Johnstone, The Dalles, Oregon, will be pleased to send descriptive circulars and quote prices.

◈ ◈ ◈

B. G. PRATT & CO., 50 Church Street, New York, were represented at the National Apple Show by Mr. B. G. Pratt personally, who was on hand to explain the quality, benefits, advantages and results that can be obtained by using culfocide and scalecide. His exhibit was purely for the education and benefit of the growers, he even declining to take orders. Circulars, catalogues, etc., giving much valuable and general information can be obtained on request.

◈ ◈ ◈

NURSERY STOCK.—The Washington and Sunnyside Nurseries were on hand at the National Apple Show with fine displays and representatives to tell the fruit grower anything he might ask about—quality of trees, methods of setting and manner of proper root pruning at setting times. It is sad but true that so many people do not know the folly of setting poor trees, and, alas, too many do not know a poor tree from a good one. It was a good act on the part of the nurserymen to be on hand to help educate the people on quality in trees, with examples, the trees themselves, to show the real thing. Finer root systems we have never seen than the ones shown.

◈ ◈ ◈

ARSENATE OF LEAD displays at the National Apple Show. There is no one article that will cost the apple grower more in loss in one day's work than poor quality spray for the codling moth. The manufactured ingredients, chemical combinations and reasons why a spray is good or poor are as a rule given little study or attention by the fruit grower. This is one article he buys largely on recommendations of other growers who

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have made experiments. Luckily we have been fortunate so far in generally getting good quality, but the quantity of arsenate of lead now used is measured in carloads and thousands of dollars, consequently any saving in expense of manufacture would be a killing on profits for the factory and a big failure in killing of worms for the grower, costing us hundreds of thousands of dollars in a single season. Growers must give the quality and composition of sprays more attention and not depend so often on recommendations of others. The exhibition and explanations and information given by the Grasselli Chemical Company and the Sherwin-Williams Company were great helps to the fruit growers and thoroughly appreciated—a step in the right direction; pretty good evidence of their belief in the quality of the arsenate of lead they make.

◈ ◈ ◈

PARLIN & ORENDORF were the only firm on hand at the National Apple Show with a line of orchard discs. The orchardists want to know more about discs and appreciated the opportunity given by Parlin & Orendorf.

◈ ◈ ◈

LABELS at the National Apple Show, Spokane. E. Shelly Morgan, agent for the Schmidt label, had a magnificent display in charge of Mr. Johnstone. The label is the last finishing touch the fruit grower adds to his fancy package. No other act of the fruit grower, costing no more than the price of a label, adds as much value to the package by increasing its attractiveness. But this one very important feature of attractions is only a very small part of the good work of a handsome label. It advertises your brand, your city, your district, and helps create a reputation and establish a permanent demand. If you want a label write E. Shelly Morgan, Wells Fargo building, Portland, Oregon.

◈ ◈ ◈

C. G. BETTS & CO., Spokane, made a very interesting exhibit of a product of great convenience and value to the fruit grower, and particularly to the one who irrigates, a product made from a combination of tar and other ingredients, cement we believe, which will be of inestimable value and convenience in quickly repairing flumes which become leaky, filling a long felt want. Mr. Betts was so busy that we did not feel like taking up too much of his time, but we are sorry now, because we would like to give you a fuller and better description of this product. However, we know C. G. Betts, Spokane, will cheerfully supply further information and be glad to send descriptive circulars and quote prices upon request.

◈ ◈ ◈

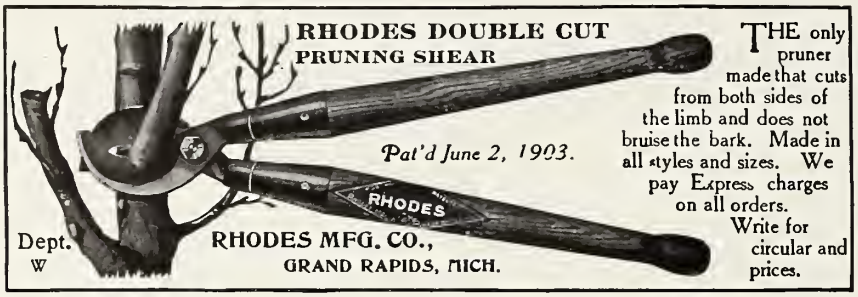
THE Spokane Seed Company made a splendid educational show in a general exhibit at the National Apple Show, a benefit to the grower and much appreciated. Poor seed means no crop. Good seed, with proper care and conditions, means a rich harvest.

◈ ◈ ◈

THE California Spray Chemical Company, of Watsonville, California, were exhibitors of the Ortho brand of arsenate of lead. The Bean Spray Pump Company, of San Jose, California, are sole distributors of this brand and have been successful in placing it in all of the main fruit centers of the Northwest, and it is giving splendid satisfaction.

◈ ◈ ◈

THE Leonard Coates Company, Morganhill, California, have issued a very attractive little article, which gives much valuable information about the eucalyptus tree. In certain sections of California, where there is not enough moisture for the oak and pine and other trees to grow, the eucalyptus thrives and adds to the attractiveness of the farm in every way. The eucalyptus is valuable, taken in addition to its beauty, on account of the very rapid growth. Handsome furniture is now being manufactured from eucalyptus wood in California. It will be well worth your while to send for this circular, which is free.



THE only pruner made that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes. We pay Express charges on all orders. Write for circular and prices.

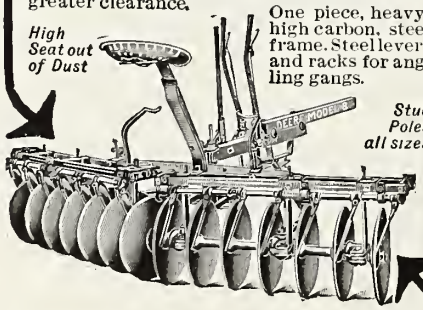
Hitch Up to a New Deere Model "B" Disc Harrow

DRIVE out to your field with this harrow and show your neighbors the best job of discing they ever saw—unless they know the **Model "B."**

Our spring pressure increases flexibility wonderfully, and flexibility means more thorough cultivation. Penetrates deep and pulverizes thoroughly, **cutting** out dead furrows and uneven places.

This excellent harrow meets all demands. Built in all sizes, from four to nine feet width, with 16", 18" or 20" discs.

Our famous hardwood bearings, oil-soaked. Straight oil tubes, with spring plugs to exclude dirt. Steel shanks set edgewise for greater clearance.



Double leaf, oil-tempered seat spring. Scrapers of swinging type, greatly improved over all others. Stub poles for set-over hitch and convenience in storing. **Nothing** slighted, but all details fully and practically worked out.

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and keep posted. We have but briefly mentioned some of the strong features above. Just drop us a post card and we will promptly send detailed **proofs** free. **Deere** goods are of the highest standard, and satisfy the most exacting.

Tongue trucks or fore carriages furnished extra.

We make six other styles of disc harrows for all requirements. Tell us size you need.

Ask for our latest **corn book.** The whole subject of gathering, selecting, curing and testing the seed, as well as planting, treated in a small space, **fully illustrated.** The book for the man who wants better corn.

Useful and handsome pocket ledger free, if you will do us the favor of **mentioning this paper.**

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is strong, substantial, and lasting, and fully guaranteed. It has low wheels enclosed by a steel frame, with steel tongue. Carries cultivator teeth sweeps, hoes, and furrowers, and is equipped with side hitch and fruit and tree shield. Adjustable for depth and width of cut. Easily handled.

We carry stock in San Francisco. Agencies in all principal Pacific Coast cities. Write for name of nearest agent, also new 56-page catalogue of all 1910 Planet Jr implements, including Orchard Cultivators, Beet Cultivators, Horse Hoes, Seeders, and Wheel Hoes. Free on request. Write today

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FRUIT GROWERS TO ATTEND AT WENATCHEE

FRUIT GROWERS from every district in the Northwest have been invited to attend the sixth annual session of the Washington State Horticultural Association at Wenatchee, Washington, January 12 to 14, 1910, when there will be addresses by men who have made successes in the various branches of horticulture, also discussions by members of the organization and visitors. L. G. Monroe, secretary of the association, announces the following program for the meeting:

January 12—Opening session, morning: Address of welcome, J. A. Gellatly, mayor of Wenatchee; response, H. M. Gilbert, North Yakima; president's address, J. L. Dumas, Walla Walla; report of treasurer, H. W. Greenberg, Spokane; report of secretary, L. G. Monroe, Spokane; "Some Orchard Problems," R. A. Jones, Spokane.

January 12—Afternoon session: "Resistant Stock Vineyard," E. H. Twight, Lewiston, Idaho; "The Prevention of Frost Injury in Orchards," F. A. Huntley, state commissioner of horticulture, Kennewick; "Combination Sprays," Professor A. L. Melander, entomologist, Washington State College, Pullman; "Better Fruit for Washington," P. S. Darlington, special horticultural inspector, Wenatchee; "Summer Pruning," Professor C. L. Smith, Spokane.

Discussion: "How I Prune," led by A. Van Holderbeke, former state commissioner of horticulture, Spokane; W. T. Clark, Wenatchee; Professor W. S. Thornber, horticulturist, Washington State College, Pullman; Ed Remy, North Yakima, and Captain Hogan, Tucker.

January 12—Evening session: "The Culture of Fruit as Related to the Culture of Men," W. E. Wilson, president State Normal School, Ellensburg; "Four-Tier Apples and Four-Tier Boys," Professor N. D. Showalter, head of rural school department, State Normal, Cheney, Washington.

Discussion: "Uniform Grading and Packing as a Commercial Asset," led by H. M. Gilbert, North Yakima; "The Marketing of Fruit: Future Profits in Fruit Growing," led by E. H. Shepard, Hood River, Oregon, and W. H. Paulhamus, Sumner, Washington.

January 13—Morning session: "The Planting and Care of Young Orchards in the Pacific Northwest," E. C. Burlingame, Walla Walla; "Cultivation of Irrigated and Nonirrigated Orchards," Professor R. W. Thatcher, director agricultural experiment station, Washington State College; "Maintaining the Fertility of Orchard Soils," J. A. Balmer, Cle Elum.

January 13—Afternoon session: "Fruit Growing in the Okanogan," W. E. Kirkpatrick, Epley; "Methods of Fruit Packing," Professor W. G. Brierly, Washington State College; "The Improvement of Western Fruits," Professor W. S. Thornber, horticulturist Washington State College.

Discussion: "Control of the Codling Moth," led by R. E. Trumble, Wenatchee; M. N. Richards, North Yakima; J. D. Taggard, Waitsburg; L. F. Williams, Spokane, and O. C. White, Olympia.

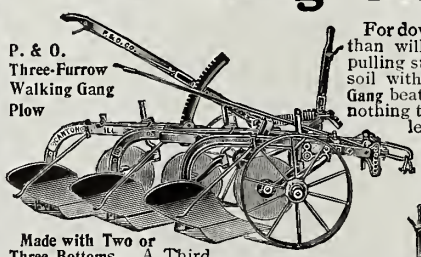
January 13—Evening Session: Reception by the Chelan County Fruit Growers' Union and the Wenatchee Commercial Club.

January 14—Morning session: "How to Irrigate," E. A. Crane, C. E., Kettle Falls; "Some 1910 Commercial Fruit Problems," C. A. Tonneson, Tacoma; "The Fruit Grower as a Home Builder," General T. R. Tannatt, Farmington.

The afternoon session on January 14 will be devoted to reports of committees, the election of officers and unfinished business.

P & O

Walking Gang Plows



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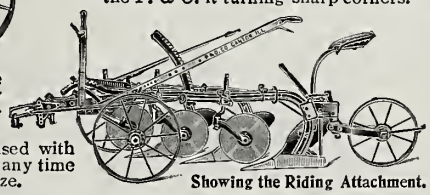
For downright hard work, when you need a plow than will stand hard usage, that will stand the pulling strain of eight or ten horses in any kind of soil without being damaged, the P. & O. Walking Gang beats them all. As it has no frame, there is nothing to get out of order. Provided with three levers, allowing a wide scope of adjustment. Square corners can be made without raising the bottoms out of the ground. No gang plow made can equal the P. & O. it turning sharp corners.

Made with Two or Three Bottoms. A Third Plow Attachment can be added to the Two Furrow Plow. The Three Furrow Plow can be cut down in size by removing the outside beam and bottom.

A Riding Attachment can be purchased with the plow, or at any time in the future. It is made to fit either size.



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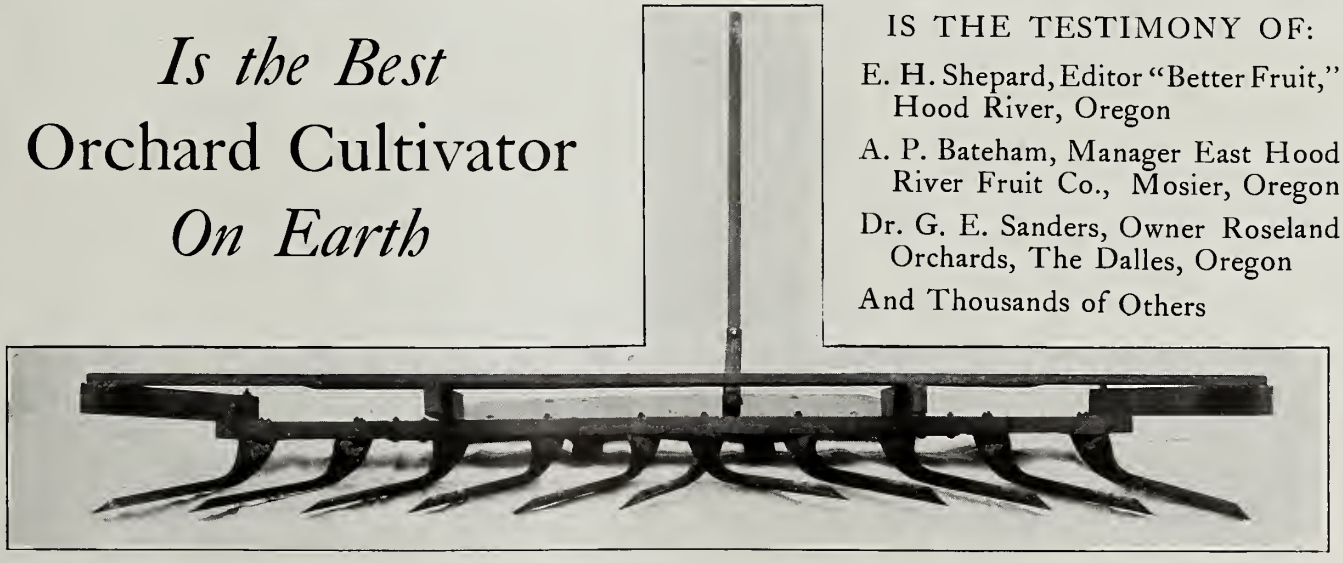

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HOW PAINTING AND PAINT INCREASE PROFITS

By S. B. Chittenden, Jr.

THE success of the average American farmer today is due largely to the fact that in running his farm he endeavors, not only to produce as much as possible, but keeps his weather-eye open on the question of the cost of operation. By carefully watching expenses he is able to make larger net profits. There is one important factor in expense, however, which has not received the notice that it should from the average farmer of today. This is the use of paint for preserving farm buildings, implements, tools, etc. The average farmer does not appear to realize what a tremendous saving in annual renewals can be accomplished by keeping his buildings, machinery, fences, tools, etc., in perfect condition with a coat or two of paint at regular intervals. If he would only stop and consider that by painting he can prolong the life of all of his farm necessities, and that this means less yearly expense and larger net profits, a revolutionary movement along these lines would soon set in.

Paint does three important things for the farmer who uses it:

First: It improves the appearance of the farm buildings, giving the farm a "prosperous look." This in itself enhances the value of the farm.

Secondly: It enables the farmer to get the largest amount of work out of his machinery, implements, etc., for the longest space of time, and for the smallest average wear and tear per year.

Thirdly: It decreases the farmer's net annual outlay for expenses, as it distributes the cost of renewals over a much longer period of time than if the machinery, etc., is allowed to go on year after year without any protection, until it is entirely worn out.

The cost of lumber also plays an important part in the question of painting and net profits. The farmer who allows his barn to go year after year without a new coat of paint is simply laying up heavy expenditures for himself. Lumber is today fully twice as expensive as it was a decade ago, so that the farmer whose unpainted barn is beginning to feel the effects of the ravages of the weather, will have to pay just that much more for lumber than he did when he put up his barn a number of years go. Paint is a great wood preservative, as the oil sinks into the pores of the wood and prevents the dampness from getting in and causing decay. If a barn is painted at regular intervals of about two or three years, the lumber will last fully twice as long as one that is not painted at all.

All of these facts go to show that the up-to-date farmer who is far-sighted enough to protect his farm necessities by a coat of paint at given intervals, will eventually have larger net profits on his crops, as his average expenditures for wear and tear will be considerably smaller than those of the man who simply "lets things slide."

When a farmer has once decided that painting is an economic factor in the results to be obtained from his farm, it is very important that he should choose the right paint for the work at hand.

In paints, as in all other commodities, there is always the best, second best, and worthless imitations, where quality is sacrificed for "price." The best costs, at most, only a few cents more than the inferior product and contains better raw materials, better methods of manufacture and the greater care and experience of the maker. This makes the difference in cost practically nothing; the difference in appearance, covering capacity, and durability, everything. There is an axiom in the paint business, "The lower the price, the higher the cost of the job." The difference in cost of high quality and inferior goods always proves that *the best goods are in reality the most economical.* The farmer may well remember this in buying his paint for the farm.

◈ ◈ ◈

State College of Washington
AGRICULTURAL EXPERIMENT STATION
Pullman, Washington, December 7, 1909.

Better Fruit Publishing Company:

I want to say that the last number of "Better Fruit" is certainly a number to be exceedingly proud of. I hardly know what to expect next from you men. It keeps growing better and better. I am of the opinion that you will have to change your name after a little to the "Betterer" rather than "Better Fruit."

Very truly yours,
W. S. Thornber.

THE *horse* does all the work, except holding the pole, with the *H. P. Spromotor.* It can be operated by either horse or hand. Has eight nozzles at 175 pounds pressure, which practically smoke the tree with spray. All automatic. The number of nozzles can be arranged to suit size of trees. The largest tree may be sprayed. Same price for one or two horses.

The *H. P. Spromotor* can be arranged for vineyards, row crops, strawberries or grain crops. The nozzles will not clog. *Agents wanted.*

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It saves TIME.
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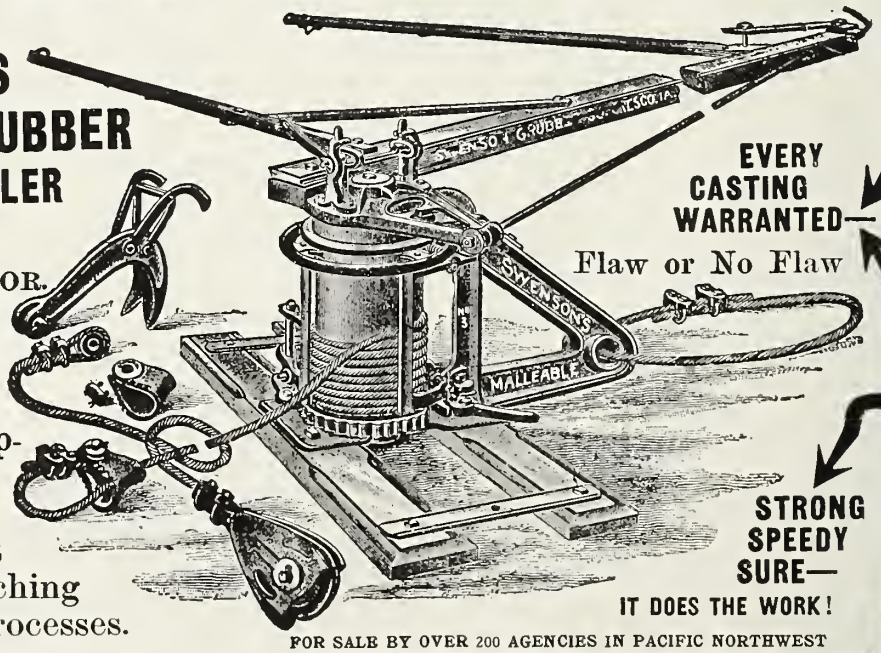
It will convert a useless piece of stump-ridden land into a profitable and productive one, without the tedious, back-aching labor of the old processes.



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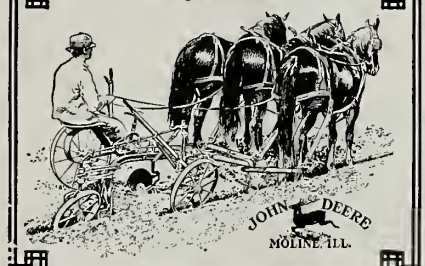
Your land is high priced and hired help expensive. There is only one way to make big money—use implements that cut down the cost of your crops. Isn't it true that when you break something on a plow it is nearly always a cast part? Wherever strain comes on a John Deere Plow there you will find steel—tool steel. Take any plow that has had hard work for five years, put it along side of a John Deere which has been in service that long—and see the difference. Then there is no paint to cover up poor material. You can see the wear and the defects. The John Deere will be solid, staunch and ready for the hardest job. Then you begin to know that quality counts.

You can take pride in owning a John Deere—the standard plow of the world for two generations.



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Mention the package number *sure*, then you will get exactly the right stuff.

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LAFEAN APPLE BILL

REPRESENTATIVE fruit growers and shippers of the States of Oregon, Washington, Idaho, Montana, Utah and California, and of British Columbia, decided at their convention in Spokane, November 16 to 18, to recommend an amendment to the Lafean bill, urging Congress to adopt the Northwestern apple box as the government standard and the Winchester bushel as the measurement standard. Sections of the bill relating to fruit grading were praised and will be supported. W. K. Newell, president of the Oregon Horticultural Union, was chairman, the secretary being L. F. Henderson of Moscow, Idaho. The committee on records is composed of J. L. Dumas, Dayton, Washington; L. G. Monroe, Spokane, and L. F. Henderson, Moscow.

The growers have named a strong delegation, headed by Mr. Dumas, president of the Washington State Horticultural Association, to attend the Colorado National Apple Show at Denver, Colorado, January 3 to 8, 1910, and enlist the fruit growers of Colorado and New Mexico in the crusade. J. F. Brown, representing the Colorado show, addressed the convention and favored the plan.

Carload shipments of prize fruit shown at the Spokane Apple Show will be sent to the Denver show, accompanied by delegates from the various districts in the Northwest, who will advocate the adoption of the recommendations. A committee to be appointed will wait upon the congressional representation in each of the five states interested and urge congressmen to work for the bill. British Columbia growers will lend their support by recommendations to Parliament, although not in the Northwest Horticultural Union.

WINTER COURSES OREGON AGRICULTURAL COLLEGE

PRACTICAL work, lectures and demonstrations will be given in such vital subjects as General Farming, Fruit Culture, Animal Husbandry, Dairying, Poultry-keeping, the Business Side of Farming, Forestry, Carpentry, Blacksmithing, Mechanical Drawing, Cooking, Sewing, Dressmaking, Home Management, etc.

All regular courses begin January 4 and end February 11. Farmers' Week February 14 to 18.

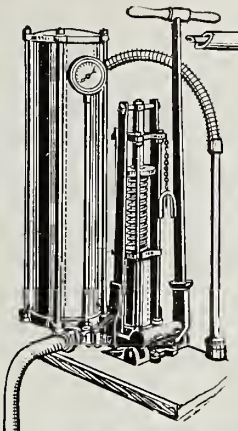
A cordial invitation is extended to all interested.

Good accommodations may be secured at reasonable rates. No age limit above sixteen years. No entrance requirements. Prominent lecturers have been secured for special topics. The instructional force of the College numbers one hundred. Excellent equipment.

A special feature is the Farmers' Week, which comes this year February 14 to 18. Lectures, discussions, and a general reunion.

For further information, address
Registrar, Oregon Agricultural College,
Corvallis, Oregon.

THE Washington Nursery of Toppenish, Washington, evidences the strongest belief in the development of the orchard industry in the Northwest. Through a letter just received from M. A. Wiggins, vice president, we are informed that this winter they will put in 5,000,000 apple grafts. Their reported sales to date are far in excess of the total sales for last year and the season is not one-half through yet. This is one of the great nurseries of the Northwest, owned and managed by enterprising and practical people, who are big business men. They have studied the fruit industry thoroughly and are familiar with our conditions, and they realize beyond all doubt that the Northwest is going to be a wonderful fruit country in the future. They are putting their capital in the nursery business because they know it is a splendid investment, and undoubtedly they will reach a rich reward. I have personally met the members of this firm and it affords us great pleasure to compliment them on the splendid business progress they have made.



More Money For You

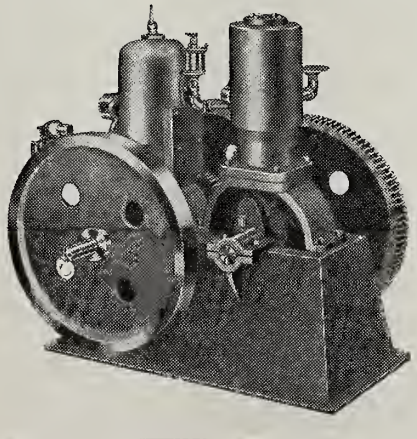
Greater productiveness of trees—larger, cleaner, and finer fruit—more money. Isn't that fruit growers' reasoning? Nothing will contribute to this end more than effective spraying. And **Effective Spraying** can best be attained with

Bean Magic Spray Pumps

Effective spraying means **High Pressure Spraying** and till the advent of the Bean Magics a high pressure could not be maintained with a hand pump for any length of time, on account of the body-racking effort needed to operate it. The Bean patent spring divides the work between the two strokes of the handle and works against only one-half the pressure shown on the gauge and saves exactly one-third the labor.

Our illustrated catalog No. 21 describes ten sizes of hand pumps, and contains much valuable spray information, and formulas. Catalog No. 22 describes Power Sprayers. Both books sent free. Write for our special offer; state number of acres and kind of fruit.

BEAN SPRAY PUMP CO.
West Julian Street
San Jose, Cal.



MARVIN'S GASOLINE AIR COMPRESSOR

SPRAYER

To be used in connection with steel tank instead of gas. Cost of operation about fifty cents per day for gasoline and oil. Gasoline engine and air compressor on same base; weight only about 350 pounds

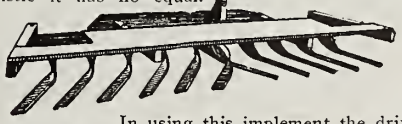
CATALOG ON APPLICATION

E. P. Marvin, Jr. Lockport, N. Y.

KIMBALL CULTIVATOR

PRICE $20 F. O. B.

Is the one to use in all orchards. It is 8½ feet wide, very easy to guide, has a fender which prevents striking the tree with knife. No hoeing of trees where used. Two horses used on it in orchard, or for destroying fern, pink, sorrel, oats, briars and Canada thistle it has no equal.



In using this implement the driver will stand in center of board, over knives, and to guide it will step to right or left, as occasion requires, and if anything should catch or gather on the knives the driver will step forward on draft board, tilt the handle forward, raising the knives, so that anything that has gathered on them may free itself. Keep all of the burrs tightened, and should any of the knives get bent out of shape force them back to place without removing them from the frame.

S. P. KIMBALL Salem, Oregon

HEADQUARTERS FOR
CENTURY
SPRAY PUMPS
Hose, Nozzles, First-class Plumbing Supplies
C. F. SUMNER
Successor to Norton & Smith
HOOD RIVER, OREGON

THE RAILROAD AND THE PACIFIC NORTHWEST

THE business of a railway company is, primarily, that of conducting transportation. In conducting a transportation business in a new and developing country like the West, it is easily recognized that many things not necessary in an old, settled community, are essential to promote the settlement of the country and render its inhabitants more comfortable and contented.

The building of the Northern Pacific from 1870 on, started a movement of people to the Northwest. Now, the expansive force of 90,000,000 people of the United States is sending thousands of wholesome men and women into this great Northwest, not to seek for religious freedom; not to seek political liberty, for they have both everywhere in this broad land; not to conquer a weaker people; not to get gold and silver from the mines; but for the purpose of making homes and earning a livelihood with patient and earnest work on the farm or ranch, in the orchard and in the forest.

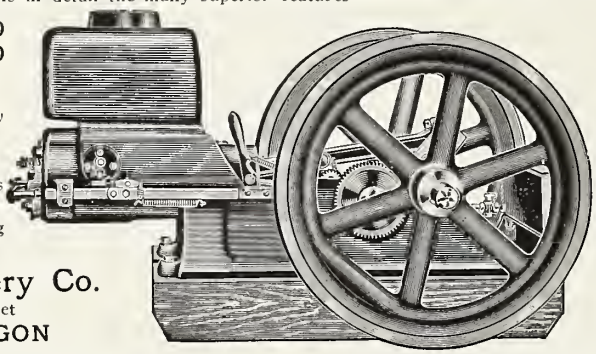
The immigrant from foreign countries also turns with longing eyes from his now crowded environments to this happy land of fortune.

As far as it has been able, the Northern Pacific Railway has endeavored steadfastly and continuously to improve its facilities and conveniences for travelers and shippers, so that the products of the fields, and herds and orchards and mills and factories, no less than they themselves, might be transported most rapidly, *cheaply*, easily, and satisfactorily. To this end new double track, longer sidings, new and larger station buildings, increased and better equipment, more trains, new extensions, etc., have been built.

For the fiscal year ending June 30, 1909, between 500 and 600 miles of main line were relaid with eighty-five or ninety pound steel rails. The Northern Pacific Company now operates nearly 500 miles of double track. Twenty-seven new passenger and freight station buildings have recently been built or are now in course of construction. Concrete or steel bridges and viaducts or earthen fills are rapidly being substituted for former temporary structures. Interlocking plants are being installed at all important crossing points so that trains may continue at undiminished speed. These examples will show what is being done in all lines of physical improvement.

Items of special interest to the fruit industry

THE WATERLOO GASOLINE ENGINE *Is the Steady Service Engine*
Eliminates usual gasoline engine troubles. Write for complete descriptive catalogue, which explains in detail the many superior features
2-horsepower - - $ 90.00
4-horsepower - - 160.00
f. o. b. Portland, Oregon
Write us about your machinery and pump requirements
Pipe Pumps Windmills
Gasoline Engines Launches
Well Drilling Outfits
Hydraulic Rams Fittings Belting
Saw Mill Machinery
Reierson Machinery Co.
182-4-6 Morrison Street
PORTLAND, OREGON



ORCHARDIST SUPPLY HOUSE
FRANZ HARDWARE CO.
Hood River, Oregon

The NEW 1910 "FRIEND"
Is a Happy Surprise for Fruit Growers
FEATURES
Large wheels; short turning; easy drawing; large capacity; high pressure; light weight; simple; compact; low down; propeller agitator; everything complete.
Special New Features: Quick get-at-able and detachable pump valves; no threads or pipes; do the work with your cuffs on if you like; self-contained quick relief or by-pass in safety valve, with get-at-able parts. Your hands the tools.
Our season's output is now going into all parts of the world. Several new, complete power machines have just been sold to prominent California fruit growers—just as far from Old Niagara as you.
If you want to know more about this wonderful machine, write today for descriptive bulletin.
FRIEND MFG. CO.
Niagara Co. Gasport, New York
MANUFACTURERS OF THE WORLD'S BEST HAND AND POWER SPRAYING OUTFITS, AND THE CELEBRATED "FRIEND" NOZZLES, ANGLE AND REGULAR

Wallace Peerless POWER SPRAYER
(LOW MOUNTED STYLE)

Progressive fruit growers will be interested in this machine. It represents all that is best in power sprayer construction. It is not a *cobbled up* outfit composed of an *engine* picked up here and a *pump* picked up there, thrown together and *called* a sprayer. It is built from the ground up as a high grade spraying machine.
Read the following testimonials as evidence of its superiority:
La Grande, Oregon, May 10, 1909.
Gentlemen: The Wallace Peerless Sprayer you shipped here was for a friend of mine, and I fitted it up for him and tested it. *It is all you claim for it. Your regulator is just what is wanted.* Yours truly,
C. M. Riddle.
Granger, Washington, March 6, 1909.
Gentlemen: My machine is a dandy. *From the time I started it I ran it steady for seven days.* This was work with the sulphur-lime wash, with from one to four bordeaux nozzles. A new B——— pump and engine has been working just over the fence from me, and while I have been spraying *six acres per day* they have been getting over *only two and a half acres per day.*
Yours truly, B. D. Thompson.
Linden, California, November 18, 1909.
Gentlemen: I see no reason why you should not have a good share of the California business. I have used your pump side by side with the B———, and *yours is by far the best outfit.* D. W. Miller.
Our pressure regulator does away with all relief valve troubles. It also cuts the load and fuel consumption in the middle. If you are progressive enough to want the best there is, write us for information about this machine. Ask for catalogue "B." We will quote prices delivered anywhere.
We have succeeded to the business of the Wallace Machinery Company and the American Sprayer and Supply Company of Champaign, Illinois, and all orders for Wallace Sprayers, or for information regarding them, as well as for repairs, should be sent to
AMERICAN SPRAYER CO., Minneapolis, Minnesota

in its various localities are the completion of the Spokane, Portland and Seattle Railway between Portland and Spokane; the new line between Pasco, Washington, and Lewiston, Idaho, and the Grangeville extension beyond Lewiston; the construction of the branch line up the Shields River Valley in Montana, now practically completed, and the construction recently begun of new lines from Glendive, Montana, down the Yellowstone River, and from Mandan, North Dakota, north and south into productive territory. These new lines will open vast lands to easy settlement and provide new markets for much country that is already producing.

As rapidly as possible new and more distant markets are being opened to Northwestern fruit and other products. Fruits from this territory are now being regularly shipped to Manitoba on the North and Texas on the South, and, of course, to all sections between. Refrigerator cars equipped for passenger train service are carried on passenger and express trains when expeditious service is wanted, and with the increased number of express trains in operation in recent years, this has proven of distinct advantage to the shippers.

The Northwestern fruit industry is looming up. The area of growing orchards in the more central sections of the "Inland Empire" is rapidly expanding to localities more remote. Montana is rapidly coming to the front, and unless the signs are deceptive, will soon be a formidable competitor in the market. The Bitterroot Valley is rapidly forging ahead in increased orchard acreage, effective organization, and advertising.

The newly opened Flathead Reservation and the Clark Fork of the Columbia Country will continue toward the Bitterroot, the chain of orchards stretching eastward through the Spokane Valley.

The Yellowstone Valley is waking up on the fruit proposition, and in the Clark Fork of the Yellowstone, near Billings, there are now some fine commercial orchards where the Alexander, Wolf River, Wealthy, Gano, McIntosh Red, and other varieties of apples are raised.

It is stated that Luther Burbank has one tree containing twelve hundred varieties of apples. It would seem then that, with so many kinds to select from, all sections of the Northwest should be able, with proper experimentation and patience, to develop an apple suited to each and every locality, and thus provide an unfailing supply of the King of Fruits for the whole country.

The territory for distribution of Western fruit and apples is being constantly extended, and good fruit will always find a profitable market owing to the increased demand.

Where the great trail blazers, Lewis and Clark, made their famous journey through the valleys of the Missouri, Yellowstone and Columbia Rivers, meeting only a few Indians, there are now hundreds of thousands of acres of land under irrigation, yielding good crops and supporting a large population. The hunting grounds of the Indians have been transformed into prosperous farms; and villages, towns and cities with varied industries have taken the place of the Indian tepee.

In the states traversed by the Northern Pacific Railway from the Missouri River to the Pacific Ocean, including North Dakota, Montana, Idaho, Washington and Oregon, there are about 3,000,000 acres now under irrigation, or to be irrigated in the not distant future. Allowing an average of forty acres to a family, and five persons to a family, this acreage will support 375,000 people. It is not unfair to add to this number 375,000 more people, representing the number needed to supply the wants of these tillers of the soil and to transport their products.

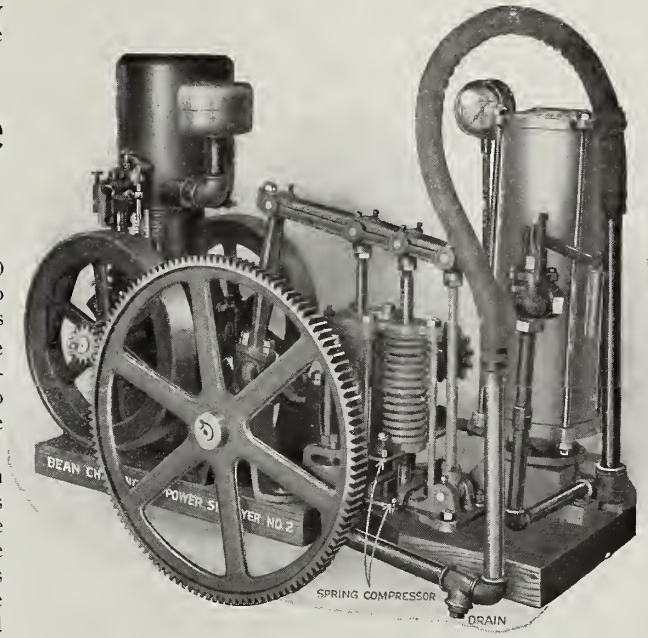
Most of the fruit and other crops of the West are the product of irrigation, but all of them are not. Dry farming is co-ordinate with irrigation and should have the support of every true, broad-gauged irrigationist. It means the utilization of a vast acreage until recently assumed to be worthless. Its limitations are as yet not well defined but it undoubtedly means sharp distinction in products to be grown by the two methods, an increased acreage devoted to fruit, an improved quality of the product, and a largely increased population near at hand to assist in its consumption.

In a systematic and scientific attempt to determine these uncertain factors in dry farming, the

LIGHT SIMPLE EFFICIENT COMPACT

LIGHTNESS—Any one can make a light spraying outfit by attaching a light engine to a light pump. But every one also wants to know a number of other things.

Bean's Challenge Power Sprayer



Shown here is light because the engine weighs only 350 pounds and requires no tank of water for cooling. The pump is as light as a high pressure pump can be, because of its

SIMPLICITY—Think of having to look after only one cylinder, one plunger and but two valves (notice explanation below), all mounted on one base, direct connected to an engine that is simplicity itself. Yet with all these we have not sacrificed

EFFICIENCY—The engine has full two horsepower at such low speed that wear is reduced to a minimum. The gears are machine cut, and the crank bearing is of bronze. The pump has porcelained cylinder, ball relief valve and all the many important patented Bean features. Every pump is tested and guaranteed at 200 pounds pressure, and yet the strain on engine and pump is very light because it is divided by use of the spring.

COMPACTNESS—This outfit can be placed on any wagon, as it requires but 20 inches by 4 feet. It is, however, generally more satisfactory to buy the **complete outfit mounted ready for use.**

To reach the valve and remove the seat it is only necessary to loosen the set screw and slide off the cover, which leaves both the cover and seat free to be lifted out. Fully patented.

SMALL ORCHARD SPRAYERS

Owners of small orchards who do not need power sprayers secure just as good results with our matchless **Bean Magic** hand pumps, which **kill the bugs, not the man.** Easiest operated and simplest spray pumps made. Save one-third the labor. Ask your nearest agent to show you one in operation.

SEND FOR OUR FREE CATALOGUE ON POWER SPRAYERS
ALSO ONE SHOWING HAND PUMPS AND NOZZLES

EVERYTHING FOR SPRAYING

Bean Spray Pump Co.

213 WEST JULIAN STREET SAN JOSE, CALIFORNIA

Northern Pacific Railway has, jointly with the State of Montana, been engaged for some time in operating four demonstration farms with results, thus far, that are extremely gratifying. These experiments are directed by professional agriculturists and are still being continued.

This Northwest of ours is just beginning to realize its great power and future. It is like a strong, brave and beautiful young man awakening to an understanding of his physical and mental powers and entering upon a career of hard work and noble achievement. The work now going on to reclaim the arid lands, drain the swamp lands, conserve the soil, preserve and renew the forests, use for agricultural purposes dry lands formerly thought to be useful only for grazing, are all steps in the forward progress of the United States in preparing to supply food and homes for a population five times what we now have. They are also steps in increasing the number of those who live near to the soil and nature—freeholders, who, in the long run, will save the republic from the complications that sooner or later are sure to arise in the congested cities, where living conditions are becoming too hard to bear, and as well a civic and economic problem of increasing gravity.

THE "WATER IS FINE"

FOLLOWING the advice sent out some months ago that the Northern Pacific Railway had secured a poultry farm of its own in the State of Washington, and was operating its own bakeries in Seattle, comes the word that this same company has arranged to secure the entire supply of water used on all of its dining cars from springs located at Detroit, Minnesota. The water is filtered before being bottled and is distributed to various points on the system by a special refrigerator car, which makes a trip every ten days over the line, unloading full bottles on the outgoing trip and picking up empties on the return.

No other water will be used for drinking purposes on any of the Northern Pacific dining cars.

With eggs and chickens from its own poultry farm, bread, cakes and pastry from its own bakeries, a special brand of unsalted butter from the Yakima Valley Creamery, its mammoth selected potatoes which have won a reputation of their own, and lastly its Pokegama water bottled at the springs, the Northern Pacific is making some unusual bids for patronage in its dining car service. A newly designed menu card, in green and gold, presents these toothsome attractions and serves as a dainty souvenir of the trip.

EARL GREY, governor general of Canada, in a letter to Premier McBride of British Columbia, describing a recent trip through the Kootenay and other districts, says: "Wherever I went I found the same enthusiasm and confidence in the future of the fruit industry. With the necessary irrigation, transportation and labor secured, every yard of that country to which water can be led will be under orchard. If your fruit industry is properly pushed and cared for your fruit valleys will soon show a larger number of happy, prosperous, wealth-producing, beautiful homes to the square mile than will be found in ten times a larger area in any other part of Canada. I have traveled much but I have never seen any district offering in a greater degree a combination of splendid climate, beautiful scenery, rich land and convenient situation."

Eary Grey is himself the owner of a fruit farm on the east side of Kootenay Lake, a few miles south of Yasodhara.

THE "New-Way" POWER SPRAYER

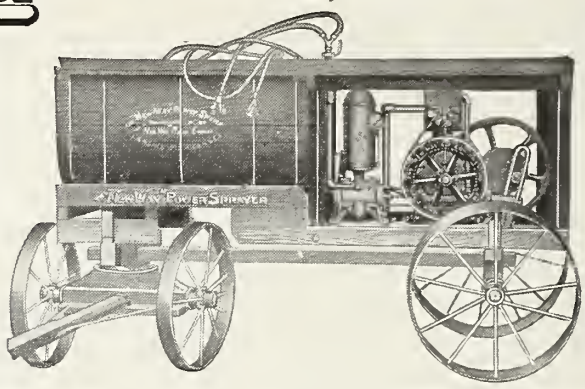
Always ready for any work in any climate
Easily detached

IS EQUIPPED WITH THE FAMOUS

"NEW WAY" AIR COOLED ENGINE

Gasoline, Distillate or Alcohol Fuel

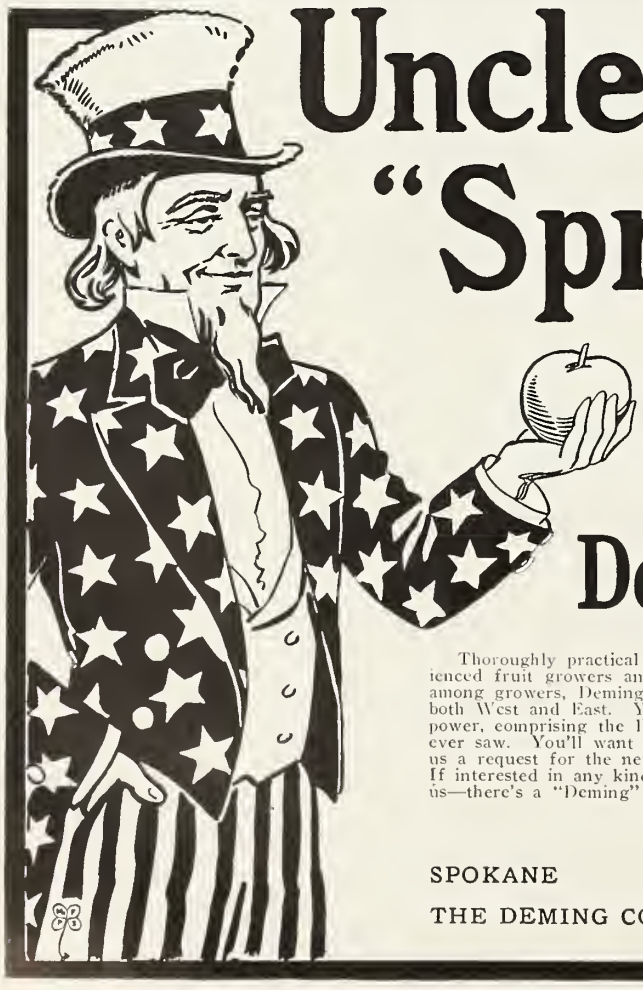
Carries high pressure without the usual vibration or strain, and is the most practical, durable and economical machine ever built for spraying. Use your own running gear if you prefer. Write us today for Spray Catalogue No. S-8



Fruits of High Quality Follow this Quality Sprayer

John Deere Plow Co.
Portland, Oregon
GILBERT & VAUGHAN
Local Agents Hood River, Oregon

Uncle Sam Says: "Spraying Pays"



Our government and the various state experiment stations, particularly those of the West, have probably given more attention to spraying than any other one subject. The universal report from all sources is that, when properly done, spraying pays, and pays handsomely. If other proof were needed, the wonderful exhibits at the recent National Apple Show would certainly prove most convincing. Spraying is making Western apples famous all over the world—and these are the outfits that have much to do with making them so.

Deming Spray Pumps

Thoroughly practical because *built to meet the needs of the men who use them;* designed by experienced fruit growers and many types made especially for Western use. Beside the favor they enjoy among growers, Deming Spray Pumps are used and recommended by most of the experiment stations, both West and East. You can rely on any one of the more than twenty styles of sprayers, hand and power, comprising the Deming line; and beside these, we offer the most attractive line of nozzles you ever saw. You'll want to know more about both; call at any of our stores and inspect them, or drop us a request for the new Deming Spray Book, full of illustrations and vital facts about spray pumps. If interested in any kind of water-raising power pump, windmill or hand pump or hydraulic ram, write us—there's a "Deming" to fill the place, and we sell it.

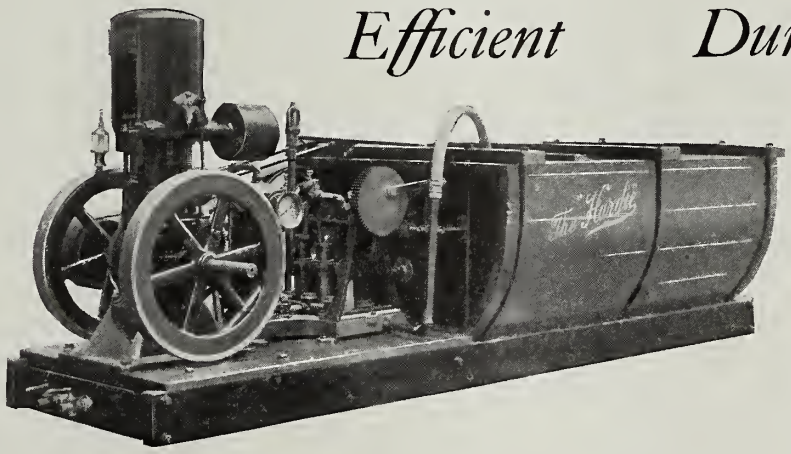
CRANE CO.

SPOKANE SEATTLE TACOMA SAN FRANCISCO

THE DEMING COMPANY, Manufacturers 743 Depot Street, Salem, Ohio

The Hardie Triplex Sprayer

Efficient *Durable* *Simple*

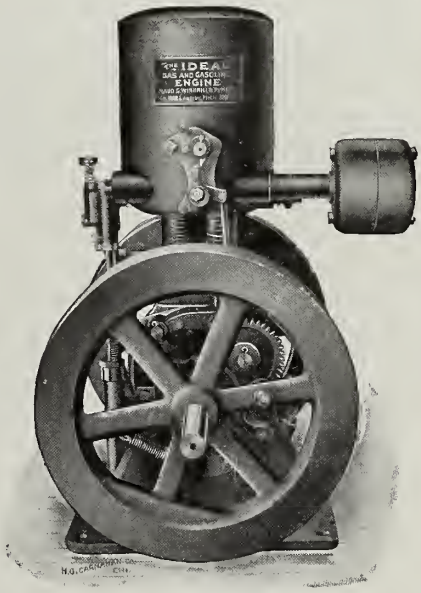


NOTHING TO WATCH BUT THE SPRAY

OUR 1910 model Triplex will suit you; will suit you in efficiency, in simplicity, in pressure, in capacity and in general makeup. Our TRIPLEX PUMP gives you an even continuous pressure, be it high or low, as desired. Our Rotary Agitator gives thorough agitation and our Ideal Engine sufficient power.

On all Hardie Power Sprayers we use Our

IDEAL ENGINE



WE use this engine as it is compactly built, has no extra water or gasoline tank and is built for hard continuous service. The cooling system is the most practical of any.

No Tank No Fan No Freezing

Our complete catalogue giving prices of twenty different styles of hand and power sprayers, engines, nozzles, etc., is yours for the asking

The Hardie Mfg. Co.

Hudson, Michigan 22 Front Street, Portland, Oregon

CALIFORNIA
Calls You
VIA
THE ROAD OF
A THOUSAND
WONDERS
PORTLAND to LOS ANGELES
AND RETURN, $55.00
Final return limit six months. Stop-overs in each direction. Corresponding low rates from all O. R. & N. and S. P. points. For interesting and attractive literature on any of the famous California winter resorts, call on any O. R. & N. or S. P. agent, or write to
Wm. McMurray, General Passenger Agent, Portland, Oregon
SOUTHERN PACIFIC
SUNSET
OGDEN & SHASTA
ROUTES
THE OREGON RAILROAD AND NAVIGATION CO.
UNION PACIFIC
OVERLAND

Make Money–Enjoy Life

In the Land of Fortune

The irrigated lands in Montana, Idaho and Washington reached by the Northern Pacific offer you the most profitable farming, vegetable-raising and fruit-growing opportunities to be found anywhere in the whole United States.

Non-irrigated lands, available at much lower prices than irrigated lands, afford big returns on the investment, from grains, grasses, alfalfa and forage crops.

Cattle and poultry raising and dairying are exceedingly profitable pursuits.

One man, raising chickens on five acres, averages $2,300 per year income.

The prize-winning fruits at exhibits nowadays almost invariably come from orchards in the Northwest.

A certain man gave his family a vacation in Southern California on the season's proceeds from eleven peach trees!

The climate and soil are great factors in the popularity of this country. People are constantly buying Northwestern lands.

Don't delay too long—write tonight for information about the state that interests you.

The Northern Pacific extends into or through Minnesota, Wisconsin, North Dakota, Montana, Idaho, Washington and Oregon.

New, rich territory is being opened up by extensions now building — affording great opportunities to get good land at low prices —land that will mount rapidly in value. Clip the slip and send it **now** to

Northern Pacific Railway

A. M. CLELAND
General Passenger Agent
ST. PAUL, MINN.

A. D. CHARLTON
Assistant General Passenger Agent
PORTLAND, OREGON

NORTHERN PACIFIC
YELLOWSTONE PARK LINE

The Scenic Highway
Through the Land of Fortune

Clip the Slip
For a Farm-home Tip

I am interested in.....

Name .....

Address .....

.....

BETTER FRUIT

OREGON

The Portland Commercial Club

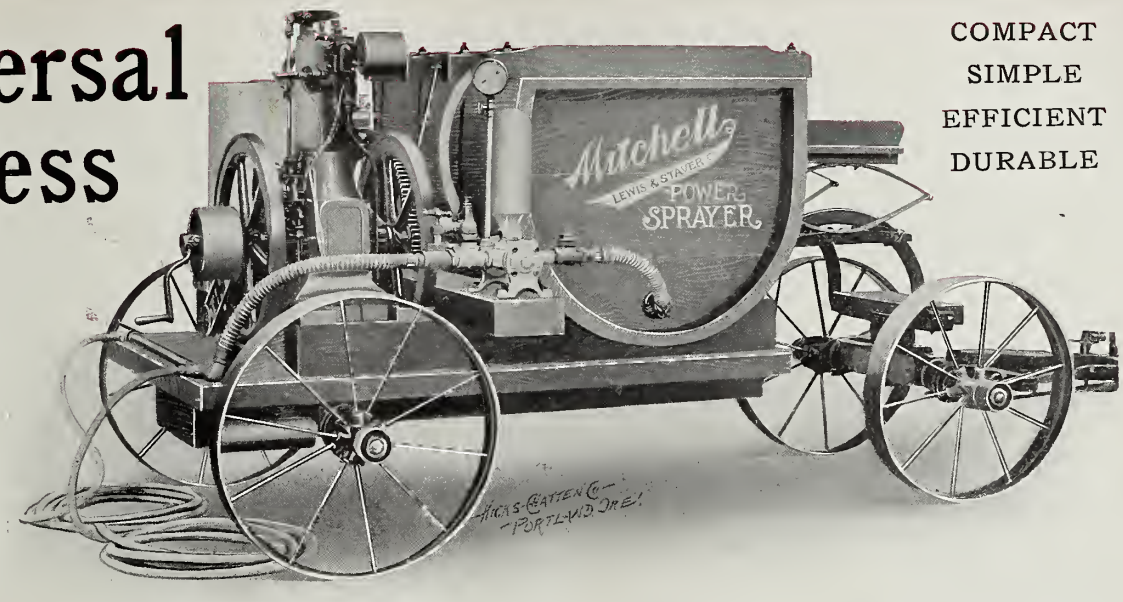
Will be pleased to furnish you literature from all points in Oregon, in addition to the most artistic and expensive booklet ever circulated, free of charge. No other subject gets half the attention given to fruit growing in these publications. Write today to

Portland Commercial Club
Portland, Oregon

IS THE PLACE FOR YOU

Universal Success

Attended the 1909 Line of



COMPACT
SIMPLE
EFFICIENT
DURABLE

MYER'S SPRAY PUMPS

GET OUR CATALOGUE ON THE 1910 LINE
IT CAN'T BE EQUALED

Our Power Sprayer exceeded our own expectations

Mitchell
LEWIS & STAVER CO.

PORTLAND
Oregon

SPOKANE
Washington

BOISE
Idaho

WE ARE PROTECTED BY THE PRODUCE REPORTER Co's SYSTEM · ALL CONTRACTS GOVERNED BY THEIR TRADING RULES AND GRADES
CREDIT BOOK
CHICAGO

A Badge of Commercial Honor

INDICATES MEMBERSHIP IN THE ONLY NATIONAL WHOLESALE FRUIT AND PRODUCE ORGANIZATION

Members trade under stipulated rules covering all possible differences that may arise over sales, consignments, and joint accounts. Disputed matters are quickly and equitably settled by the Adjusting Department. If it is an acute case, involving disposition of a car of goods, it can be handled by wire. An Inspector can be gotten to the car in only a few hours.

Members of this organization recognize their obligations to their customers, but demand the same in return, and back up this demand by the influence and power of this membership.

The service furnished members consists of the Credit Book (Blue Book) annually; Credit Sheets, weekly; Special Reports, on demand; access to the Adjusting, Inspecting, Collection and Legal Departments.

SEND FOR PARTICULARS

PRODUCE REPORTER CO.

34 South Clark Street CHICAGO, ILLINOIS

The
Red Apple
of the
Sutherlin Valley
is King of
the
Apple Family

Orchard Homes
adjoin the
New and Strictly
Modern City
Known as Sutherlin
185 Miles
South of Portland

SUTHERLIN VALLEY

Nature's storehouse of good things now being unlocked and developed is fast becoming the

"ITALY OF OREGON"

This naturally favored spot is located in Douglas County, 185 miles south of Portland, surrounded by the picturesque pine and fir covered foothills of the Calapooia and Umpqua Mountains, on the **main line of the Southern Pacific Railroad,** 520 feet above sea level, with an average rainfall of 32 inches, supplemented by the Company's modern gravity system of irrigation, which furnishes the fruit grower all that is necessary to raise the **Fancy Apple.**

TEN AND TWENTY-ACRE TRACTS

A few acres in Sutherlin Valley will assure you a fixed income for life when planted to pears or apples and developed to bearing state. We plant and care for orchards, where desired, under our horticulturist's instructions.

DEVELOPMENTS

Developments are rapid under our method and large organization. The investor is assured of quick and permanent advance and the settler is sure of all modern improvements and good neighbors.

Prompt action gives you advantage of opening price and selection.

NEXT EXCURSION JANUARY 4, 1910

Our special cars "Luseland" and "Ienza" leave St. Paul and Chicago on January 4, passing through Omaha morning of the 5th.

Write us for special rates made only to homeseekers earnestly endeavoring to better their conditions.

WRITE FOR FREE BOOKLET GIVING FULL DESCRIPTION

Luse Land and Development Co., Ltd.

ST. PAUL, MINNESOTA SUTHERLIN, OREGON